

FIG. 1

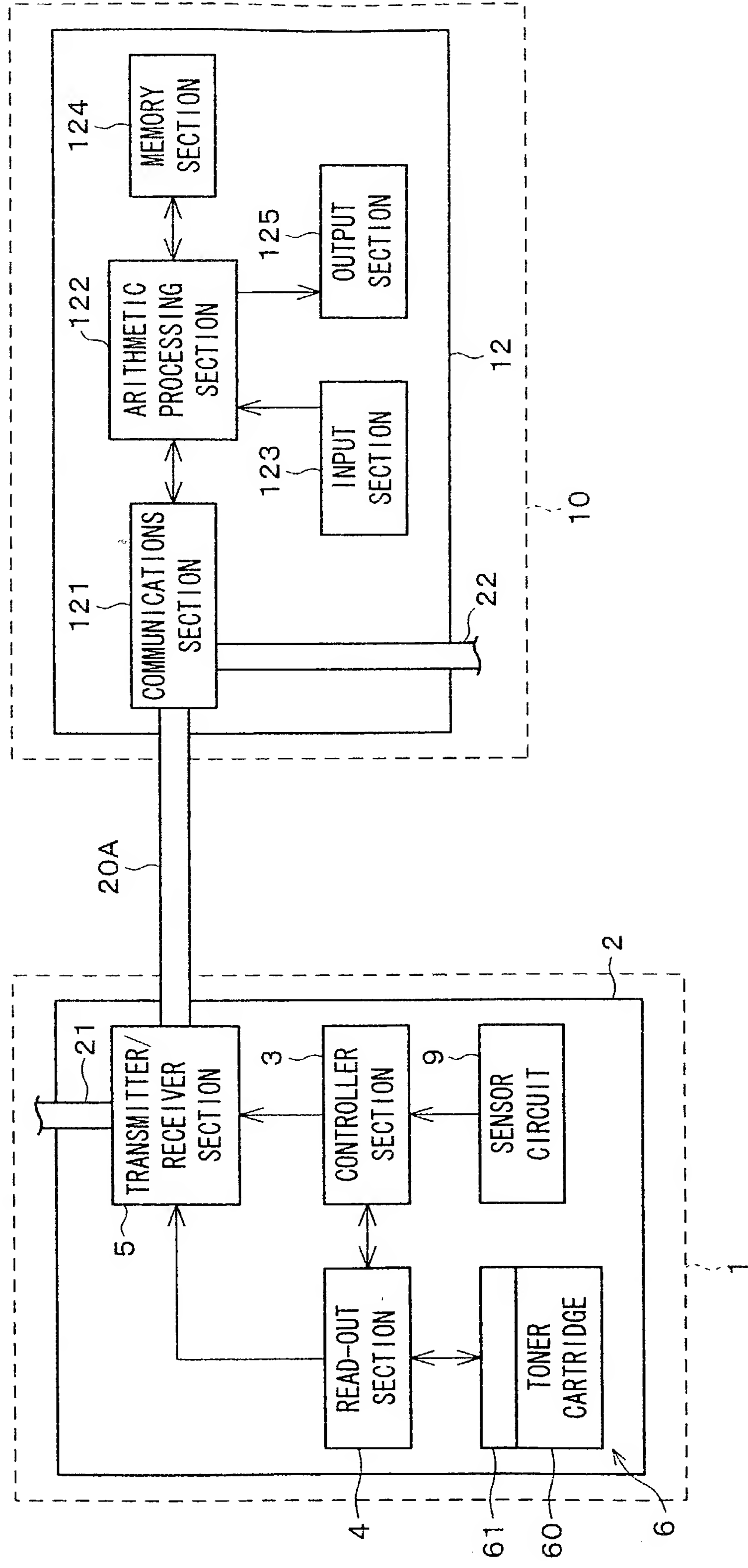


FIG. 2

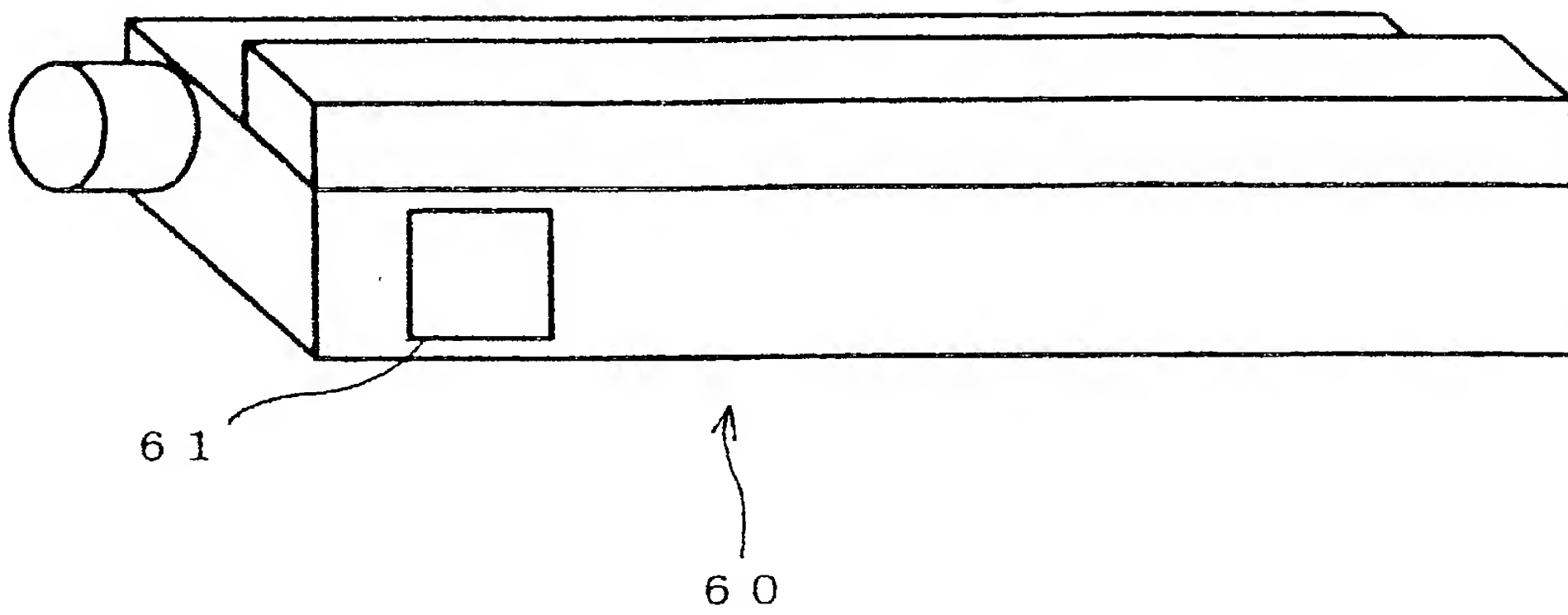


FIG. 3

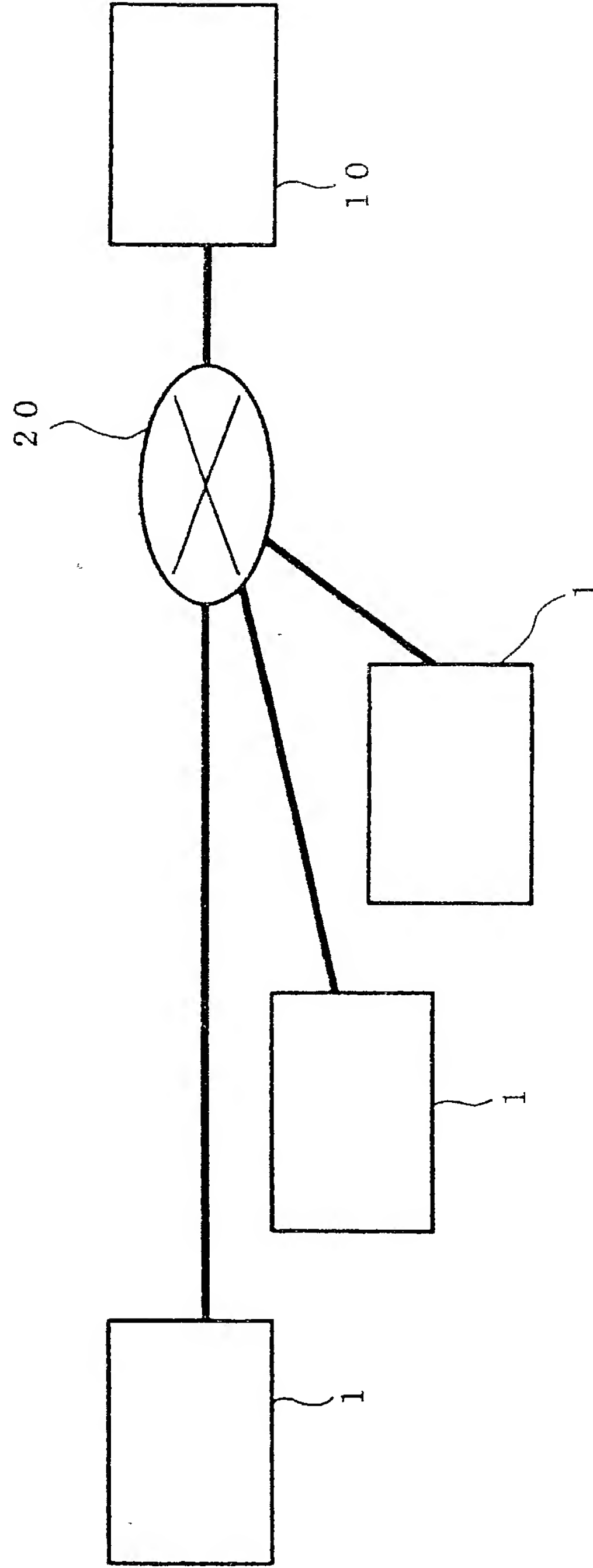




FIG. 5 (a)

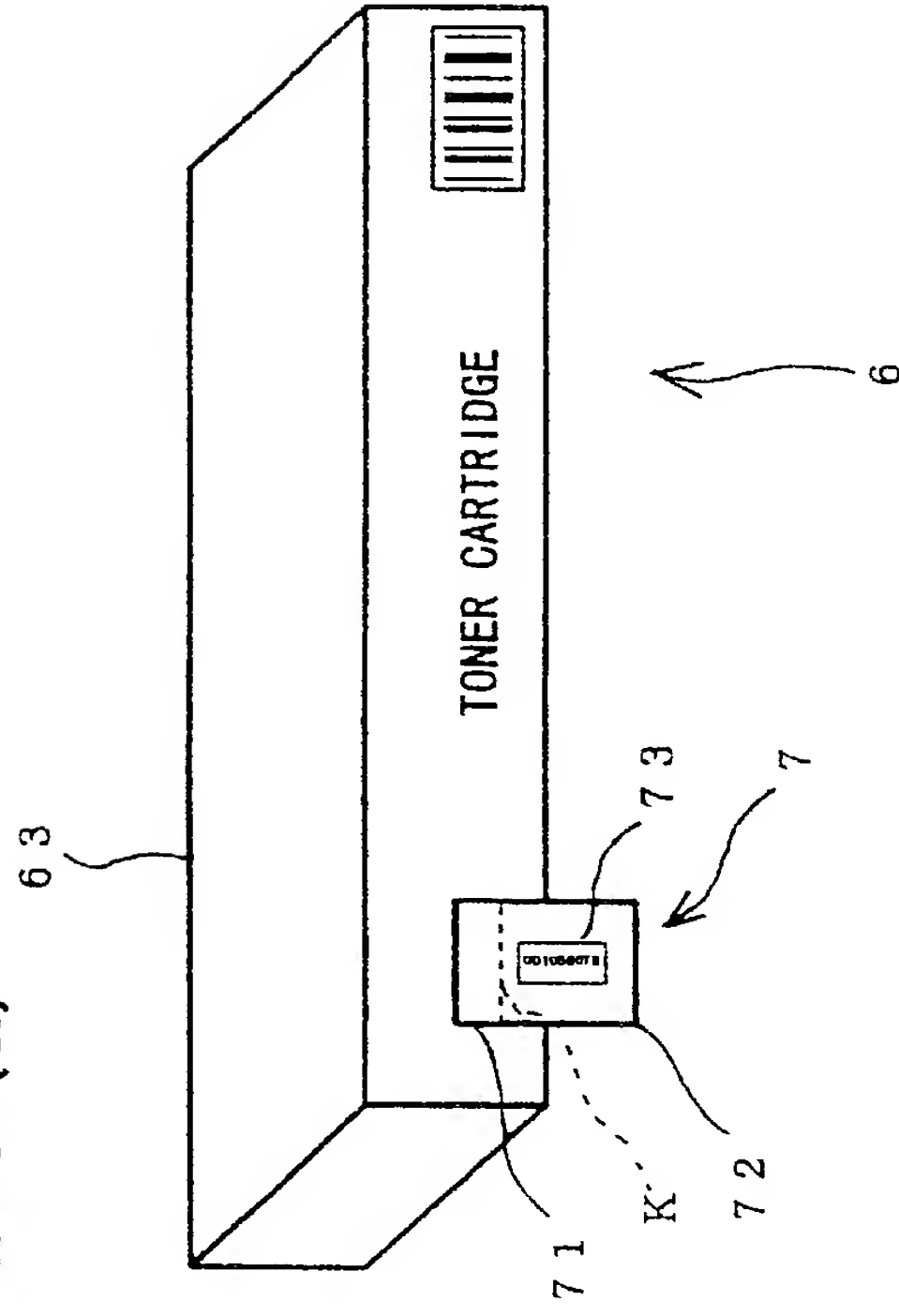


FIG. 5 (b)

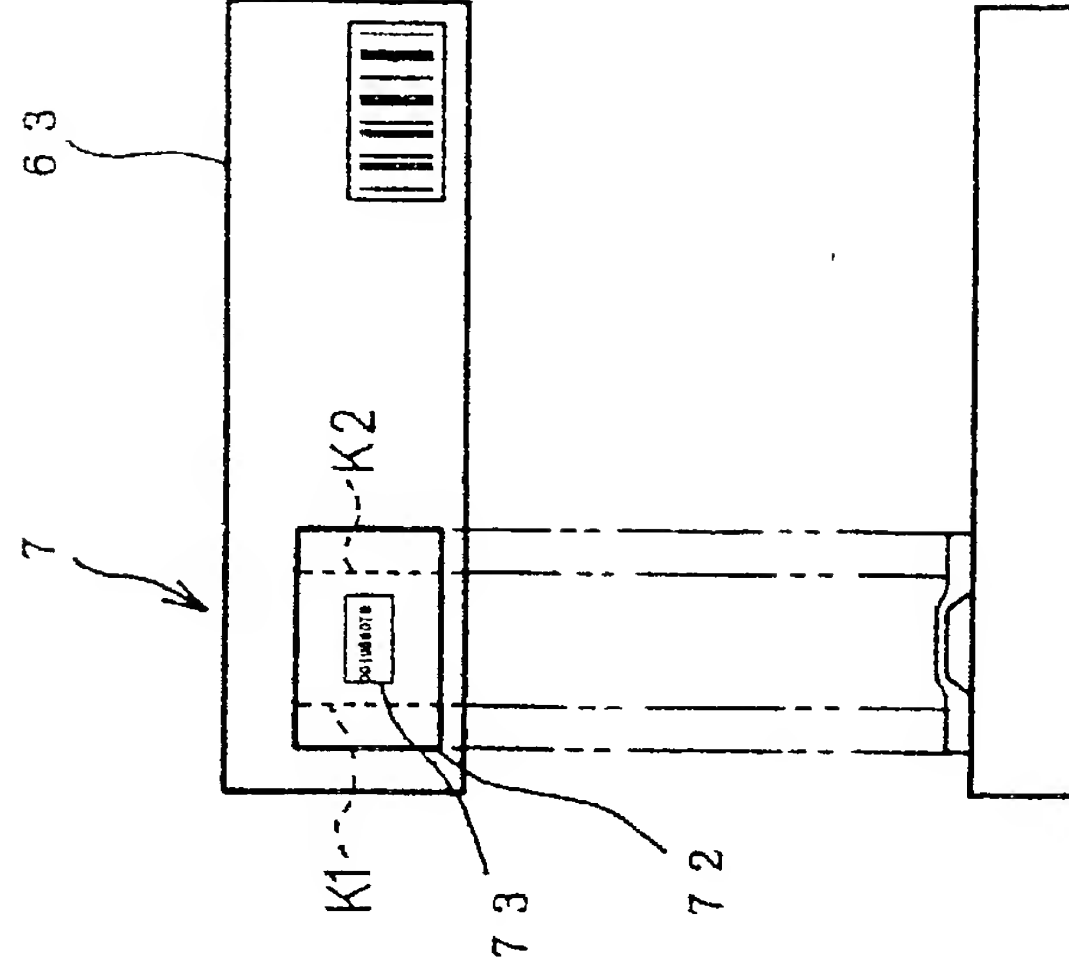
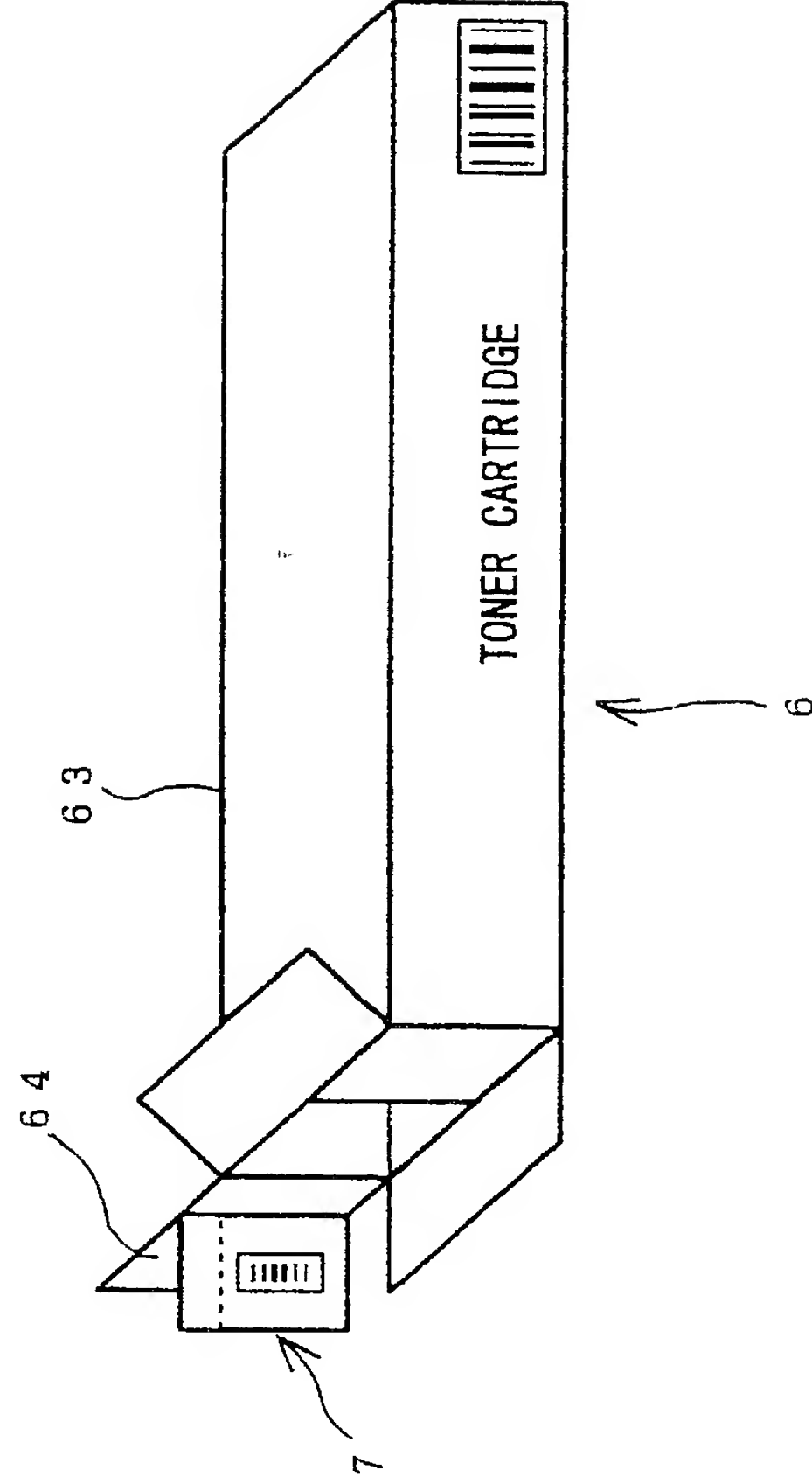


FIG. 5 (c)



UNIQUE DATA	REMARKS	THE NUMBER OF TIMES COLLECTED N	ACCOUNTING
...	...	...	...
0010 0000 0000 0000 0000	APPLICATION SOFTWARE “DATA SEARCH” Ver. 1.0	0	CHARGED
0010 0000 0000 0000 0001		2	UNCHARGED
0010 0000 0000 0000 0010		2	UNCHARGED
...		...	...
0010 0000 0000 1000 0000	APPLICATION SOFTWARE “DATA SEARCH” Ver. 2.0	0	CHARGED
0010 0000 0000 1000 0001		1	CHARGED
0010 0000 0000 1000 0010		1	UNCHARGED
...			...
...	...	...	...
0010 0001 0000 0000 0000	APPLICATION SOFTWARE “TRANSLATION ASSISTANT”	0	CHARGED
0010 0001 0000 0000 0001		0	CHARGED
0010 0001 0000 0000 0010		1	UNCHARGED
...		...	...

FIG. 7 (a)





FIG. 9 ( a ) INSTALLED CARTRIDGE DATA

MACHINE MODEL
AR-2000
LIBRE

CONTRACT SIGNER ID
000125

CARTRIDGE TYPE	DATE OF REPLACEMENT	INSTALLED CARTRIDGE DATA				THE NUMBER OF TIMES COLLECTED N	CORRESPONDING SPAKE CARTRIDGE No.
		FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA		
BLACK	N/A	N/A	N/A	N/A	N/A	N/A	N/A
YELLOW	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MAGENTA	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CYAN	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PHOTOSENSITIVE BODY	N/A	N/A	N/A	N/A	N/A	N/A	N/A

FIG. 9 ( b ) SPARE CARTRIDGE DATA

MACHINE MODEL
AR-2000
LIBRE

CONTRACT SIGNER ID
000125

DATE
03/21/2000/15:58

CONFIRM
REGISTER
CANCEL

No.	DATE OF DELIVERY	DATE OF INSTALLATION	SPARE CARTRIDGE DATA				CURRENT STATUS	THE NUMBER OF TIMES COLLECTED N
			FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA		
1	3/22/2000	—	0000 0000 0000 0101 0000	BLACK TONER(00)	AR-2000	0000 0000 0101 0000	NEW (SPARE)	3
2	3/22/2000	—	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	NEW (SPARE)	0
3	3/22/2000	—	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	NEW (SPARE)	0
4	3/22/2000	—	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	NEW (SPARE)	0
5	3/22/2000	—	0000 0000 0000 0101 0001	BLACK TONER(00)	AR-2000	0000 0000 0101 0001	NEW (SPARE)	1
6	3/22/2000	—	0100 0000 0000 0000 0101	YELLOW TONER(01)	AR-2000	0000 0000 0000 0101	NEW (SPARE)	0
7	3/22/2000	—	1000 0000 0000 0000 1101	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1101	NEW (SPARE)	0
8	3/22/2000	—	1100 0000 0000 0000 1000	CYAN TONER(11)	AR-2000	0000 0000 0000 1000	NEW (SPARE)	0
9	.							
10	.							

03/21/2000 15:58

FIG. 10 ( a ) INSTALLED CARTRIDGE DATA

MACHINE MODEL

AR-2000 LIBRE

CONTRACT SIGNER ID

000125

CARTRIDGE TYPE	DATE OF REPLACEMENT	INSTALLED CARTRIDGE DATA				THE NUMBER OF TIMES COLLECTED N	CORRESPONDING SPARE CARTRIDGE No.
		FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA		
BLACK	3/22/2000	0000 0000 0000 0101 0000	BLACK TONER(00)	AR-2000	0000 0000 0101 0000	3	1 (No. 1)
YELLOW	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	0	1 (No. 2)
MAGENTA	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	0	1 (No. 3)
CYAN	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	0	1 (No. 4)
PHOTOSENSITIVE BODY	N/A	N/A	N/A	N/A	N/A	N/A	N/A

FIG. 10 ( b ) SPARE CARTRIDGE DATA

MACHINE MODEL

AR-2000 LIBRE

CONTRACT SIGNER ID

000125

DATE

03/22/2000/16 45

CONFIRM

REGISTER

CANCEL

No.	DATE OF DELIVERY	DATE OF INSTALLATION	SPARE CARTRIDGE DATA				CURRENT STATUS	THE NUMBER OF TIMES COLLECTED N
			FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA		
1	3/22/2000	3/22/2000	0000 0000 0000 0101 0000	BLACK TONER(00)	AR-2000	0000 0000 0101 0000	IN USE	3
2	3/22/2000	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	IN USE	0
3	3/22/2000	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	IN USE	0
4	3/22/2000	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	IN USE	0
5	3/22/2000	—	0000 0000 0000 0101 0001	BLACK TONER(00)	AR-2000	0000 0000 0101 0001	NEW (SPARE)	1
6	3/22/2000	—	0100 0000 0000 0000 0101	YELLOW TONER(01)	AR-2000	0000 0000 0000 0101	NEW (SPARE)	0
7	3/22/2000	—	1000 0000 0000 0000 1101	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1101	NEW (SPARE)	0
8	3/22/2000	—	1100 0000 0000 0000 1000	CYAN TONER(11)	AR-2000	0000 0000 0000 1000	NEW (SPARE)	0
9								
10								

FIG. 11 ( a ) INSTALLED CARTRIDGE DATA

MACHINE MODEL		AR-2000 LIBRE	
CONTRACT SIGNER ID		000125	

CARTRIDGE TYPE	DATE OF REPLACEMENT	INSTALLED CARTRIDGE DATA				THE NUMBER OF TIMES COLLECTED N	CORRESPONDING SPARE CARTRIDGE No.
		FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA		
BLACK	6/12/2000	0000 0000 0000 0101 0001	BLACK TONER(00)	AR-2000	0000 0000 0101 0001	1	0 (No. 5)
YELLOW	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	0	1 (No. 2)
MAGENTA	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	0	1 (No. 3)
CYAN	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	0	1 (No. 4)

PHOTOSENSITIVE BODY	N/A	N/A	N/A	N/A
---------------------	-----	-----	-----	-----

FIG. 11 ( b ) SPARE CARTRIDGE DATA

MACHINE MODEL		AR-2000 LIBRE	
CONTRACT SIGNER ID		000125	

DATE

06/12/2000/10:56

CONFIRM

REGISTER

CANCEL

No.	DATE OF DELIVERY	DATE OF INSTALLATION	SPARE CARTRIDGE DATA				CURRENT STATUS	THE NUMBER OF TIMES COLLECTED N
			FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA		
1	3/22/2000	3/22/2000	0000 0000 0000 0101 0000	BLACK TONER(00)	AR-2000	0000 0000 0101 0000	USED	3
2	3/22/2000	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	IN USE	0
3	3/22/2000	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	IN USE	0
4	3/22/2000	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	IN USE	0
5	3/22/2000	6/12/2000	0000 0000 0000 0101 0001	BLACK TONER(00)	AR-2000	0000 0000 0101 0001	IN USE	1
6	3/22/2000	—	0100 0000 0000 0000 0101	YELLOW TONER(01)	AR-2000	0000 0000 0000 0101	NEW (SPARE)	0
7	3/22/2000	—	1000 0000 0000 0000 1101	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1101	NEW (SPARE)	0
8	3/22/2000	—	1100 0000 0000 0000 1000	CYAN TONER(11)	AR-2000	0000 0000 0000 1000	NEW (SPARE)	0
9	.							
10	.							

3 0003409 . 05425002

FIG. 12 (a) INSTALLED CARTRIDGE DATA

MACHINE MODEL AR-2000 LIBRE  
CONTRACT SIGNER ID 000125

CARTRIDGE TYPE	DATE OF REPLACEMENT	INSTALLED CARTRIDGE DATA				THE NUMBER OF TIMES COLLECTED	CORRESPONDING SPARE CARTRIDGE No.
		FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA		
BLACK	6/12/2000	0000 0000 0000 0101 0001	BLACK TONER(00)	AR-2000	0000 0000 0101 0001	1	1 (No. 5)
YELLOW	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	0	1 (No. 2)
MAGENTA	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	0	1 (No. 3)
CYAN	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	0	1 (No. 4)
PHOTOSENSITIVE BODY	N/A	N/A	N/A	N/A	N/A	N/A	N/A

FIG. 12 (b) SPARE CARTRIDGE DATA

MACHINE MODEL	AR-2000	LIBRE
CONTRACT SIGNER ID	000125	

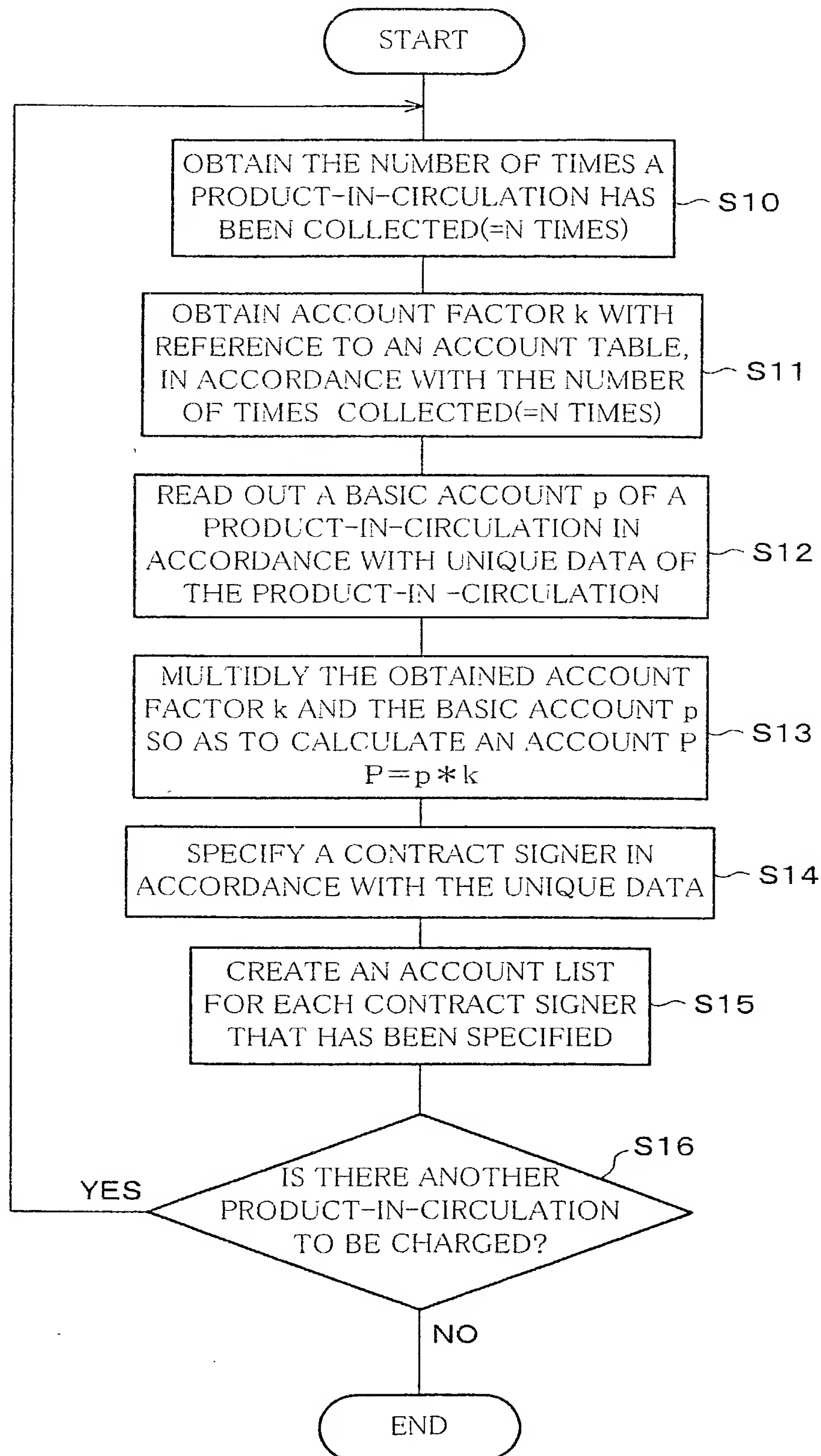
DATE: 06/20/2000/10:56  
CONFIRM

No.	DATE OF DELIVERY	DATE OF INSTALLATION	SPARE CARTRIDGE DATA				CURRENT STATUS	THE NUMBER OF TIMES COLLECTED
			FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA		
1	3/22/2000	3/22/2000	0000 0000 0000 0101 0000	BLACK TONER(00)	AR-2000	0000 0000 0101 0000	USED	3
2	3/22/2000	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	IN USE	0
3	3/22/2000	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	IN USE	0
4	3/22/2000	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	IN USE	0
5	3/22/2000	6/12/2000	0000 0000 0000 0101 0001	BLACK TONER(00)	AR-2000	0000 0000 0101 0001	IN USE	1
6	3/22/2000	COLLECTED	0100 0000 0000 0000 0101	YELLOW TONER(01)	AR-2000	0000 0000 0000 0101	COLLECTED	—
7	3/22/2000	COLLECTED	1000 0000 0000 0000 1101	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1101	COLLECTED	—
8	3/22/2000	COLLECTED	1100 0000 0000 0000 1000	CYAN TONER(11)	AR-2000	0000 0000 0000 1000	COLLECTED	—
9	6/20/2000	--	0000 0000 0000 0101 0010	BLACK TONER(00)	AR-2000	0000 0000 0101 0010	NEW (SPARE)	2
10	.							





FIG. 14



NUMBER OF TIMES COLLECTED(=N TIMES)	ACCOUNT FACTOR k
N 0 : 0	k 0 = 1
N 1 : 1	k 1
N 2 : 2	k 2
N 3 : 3	k 3
N 4 : 4	k 4

However,  $k_0 > k_1 > k_2 \dots$

FIG.16 (a)

BASIC ACCOUNT TABLE [ 1 ]

UNIQUE DATA	REMARKS	BASIC ACCOUNT p
0000 XXXX XXXX XXXX	BLACK TONER CARTRIDGE FOR AR-2000	p 1
...	...	...
0100 XXXX XXXX XXXX	YELLOW TONER CARTRIDGE FOR AR-2000	p 2
...	...	...
1000 XXXX XXXX XXXX	MAGENTA TONER CARTRIDGE FOR AR-2000	p 3
...	...	...
1100 XXXX XXXX XXXX	CYAN TONER CARTRIDGE FOR AR-2000	p 4
...	...	...

XXXX IS ARBITRARY 0 or 1

FIG.16 (b)

BASIC ACCOUNT TABLE [ 2 ]

UNIQUE DATA	REMARKS	BASIC ACCOUNT p'
0010 0000 XXXX XXXX XXXX	APPLICATION SOFTWARE "DATA SEARCH"	p 1'
...	...	...
0010 0001 XXXX XXXX XXXX	APPLICATION SOFTWARE "TRANSLATION ASSISTANT"	p 2'
...	...	...
1100 XXXX XXXX XXXX XXXX	UNRECORDED VHS TAPE	p 3'
...	...	...
1101 XXXX XXXX XXXX XXXX	UNRECORDED DV TAPE	p 4'
...	...	...
0100 0000 XXXX XXXX XXXX	DVD VIDEO "XXX"	p 5'
...	...	...

XXXX IS ARBITRARY 0 or 1

2000034113 1152 3002



UNIQUE DATA-CONTRACT SIGNER ID TABLE

FIG. 17 (a)

CURRENT DATA AND TIME : 3/22/2000

UNIQUE DATA	REMARKS	CONTRACT SIGNER ID
0000 0000 0000 0000 0000	BLACK TONER CARTRIDGE FOR AR-2000	001604
0000 0000 0000 0000 0001		001604
...		...
0000 0000 0000 0101 0000		000125
0000 0000 0000 0101 0001		000125
0000 0000 0000 0101 0010		000209
...		...
0100 0000 0000 0000 0000	YELLOW TONER CARTRIDGE FOR AR-2000	003161
...		...
0100 0000 0000 0000 0100		000125
0100 0000 0000 0000 0101		000125
...		...
1000 0000 0000 0000 0000	MAGENTA TONER CARTRIDGE FOR AR-2000	03161
...		...
1000 0000 0000 0000 1100		000125
1000 0000 0000 0000 1101		000125
...		...
1100 0000 0000 0000 0000	CYAN TONER CARTRIDGE FOR AR-2000	03161
...		...
1100 0000 0000 0000 0111		000125
1100 0000 0000 0000 1000		000125
...	...	...

FIG. 17 (b)

CURRENT DATA AND TIME : 6/20/2000

UNIQUE DATA	REMARKS	CONTRACT SIGNER ID
0000 0000 0000 0000 0000	BLACK TONER CARTRIDGE FOR AR-2000	001604
0000 0000 0000 0000 0001		—
...		...
0000 0000 0000 0101 0000		000125
0000 0000 0000 0101 0001		000125
0000 0000 0000 0101 0010		000209
...		...
0100 0000 0000 0000 0000	YELLOW TONER CARTRIDGE FOR AR-2000	003161
...		...
0100 0000 0000 0000 0100		000125
0100 0000 0000 0000 0101		102611
...		...
1000 0000 0000 0000 0000	MAGENTA TONER CARTRIDGE FOR AR-2000	03161
...		...
1000 0000 0000 0000 1100		000125
1000 0000 0000 0000 1101		102611
...		...
1100 0000 0000 0000 0000	CYAN TONER CARTRIDGE FOR AR-2000	03161
...		...
1100 0000 0000 0000 0111		000125
1100 0000 0000 0000 1000		102611
...	...	...

FIG. 18

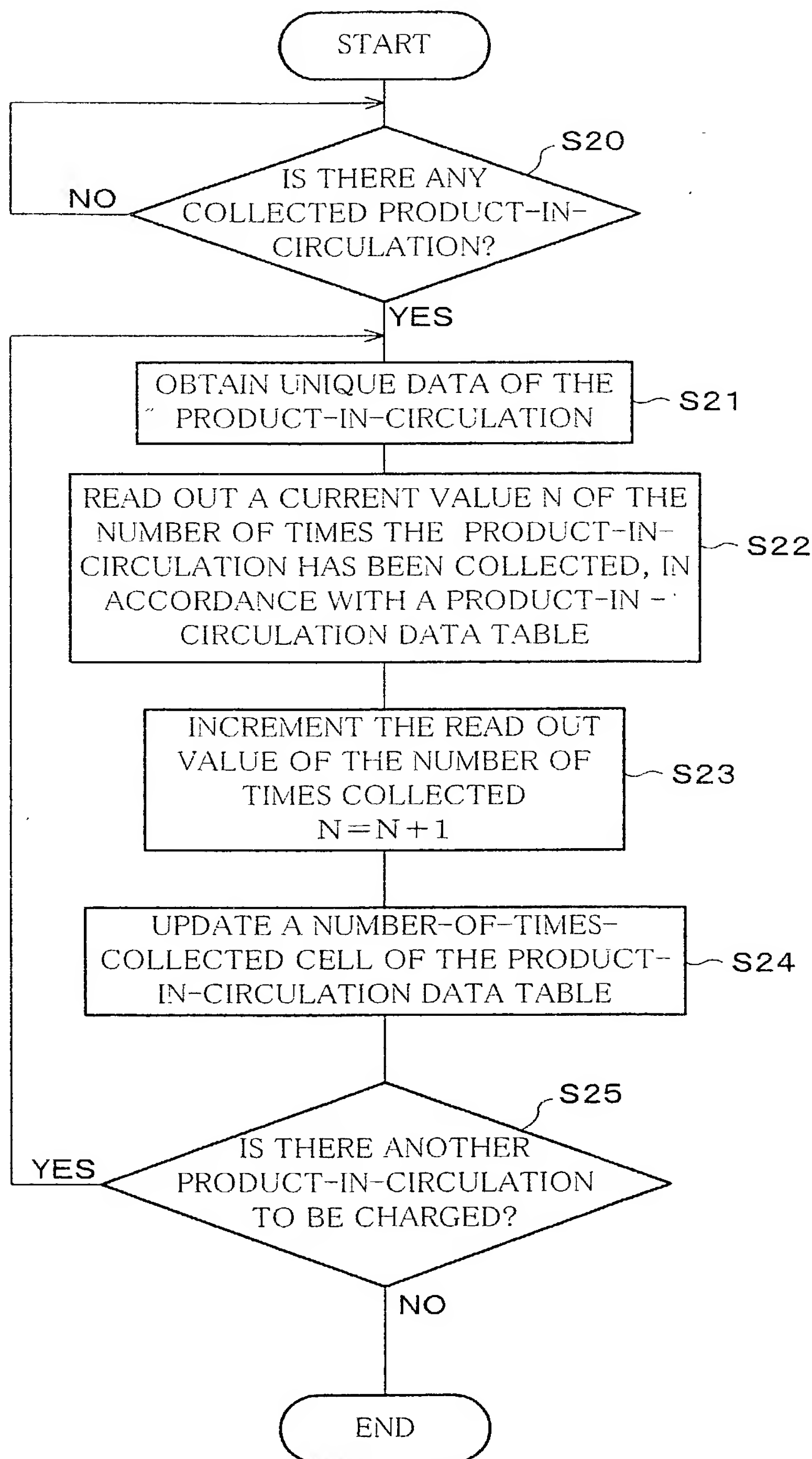




FIG. 20

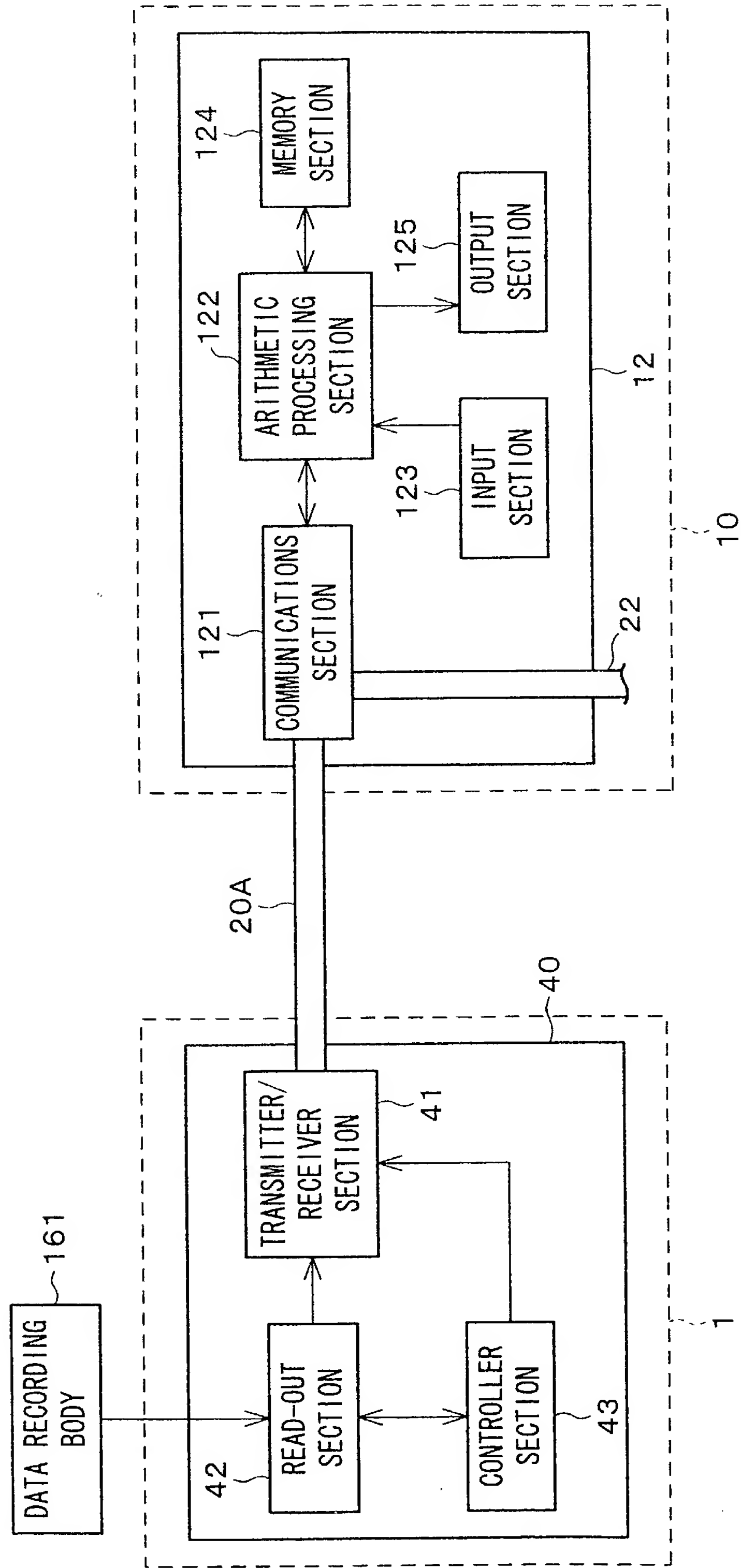


FIG. 21 (a)

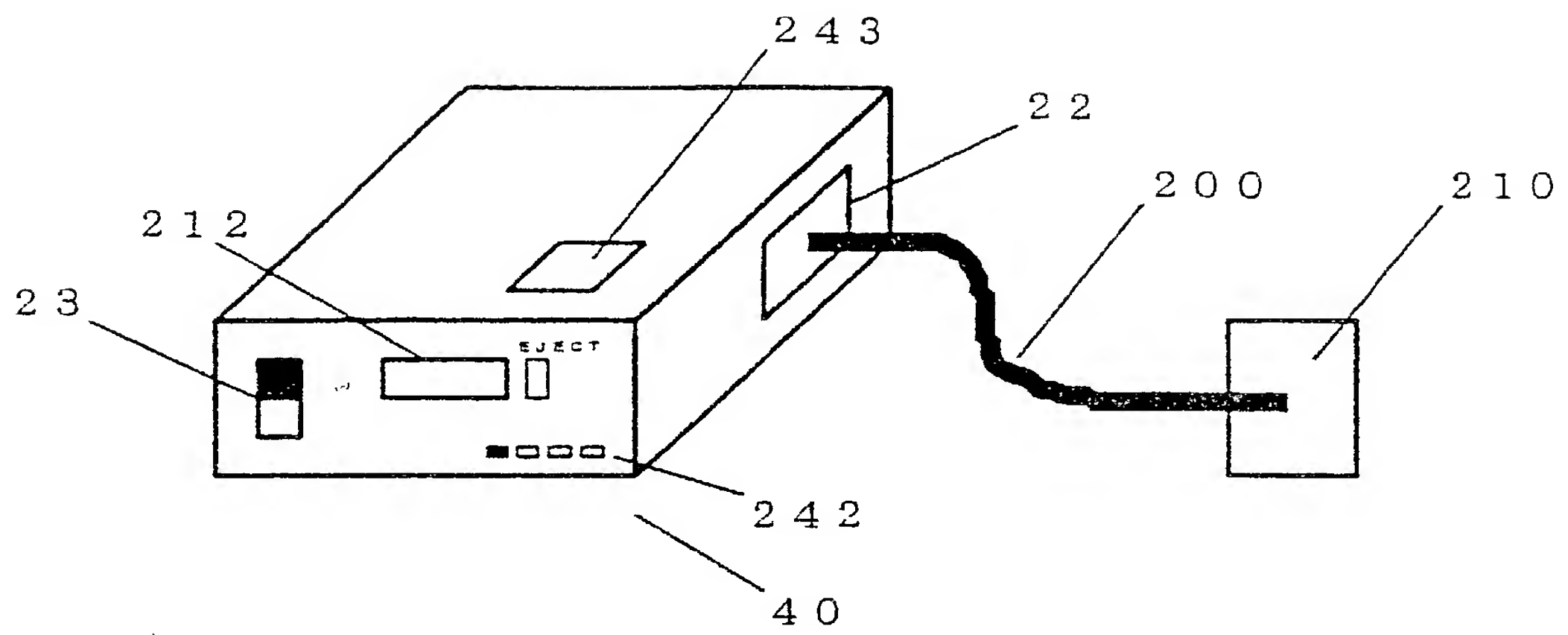


FIG. 21 (b)

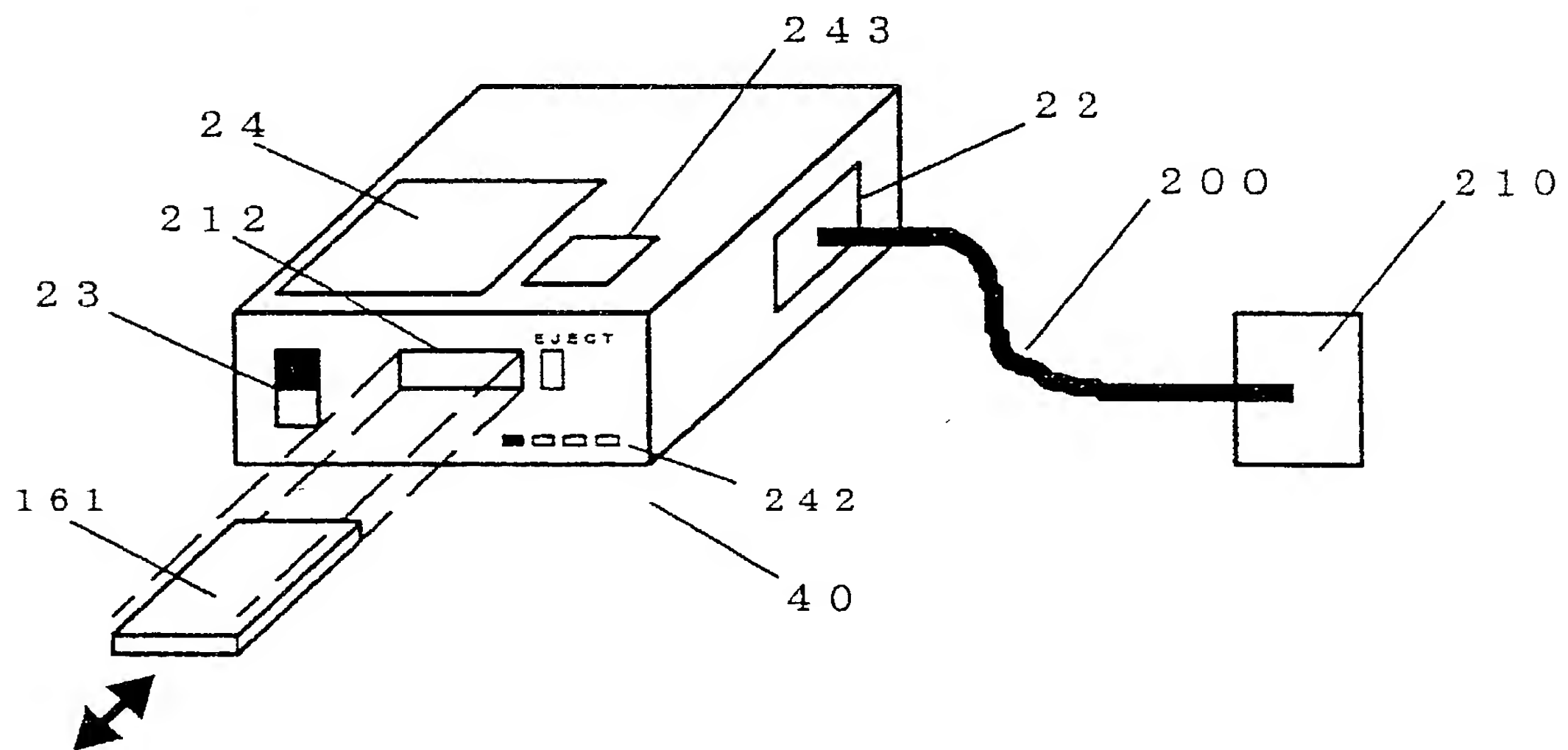


FIG. 22 (a)

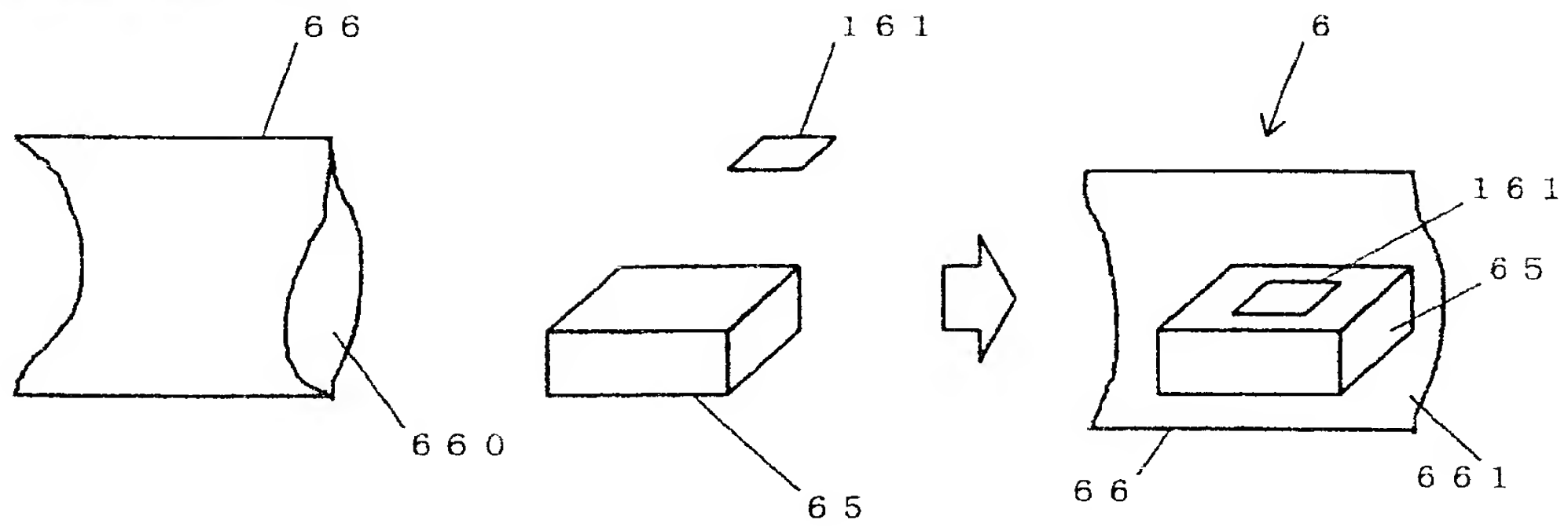


FIG. 22 (b)

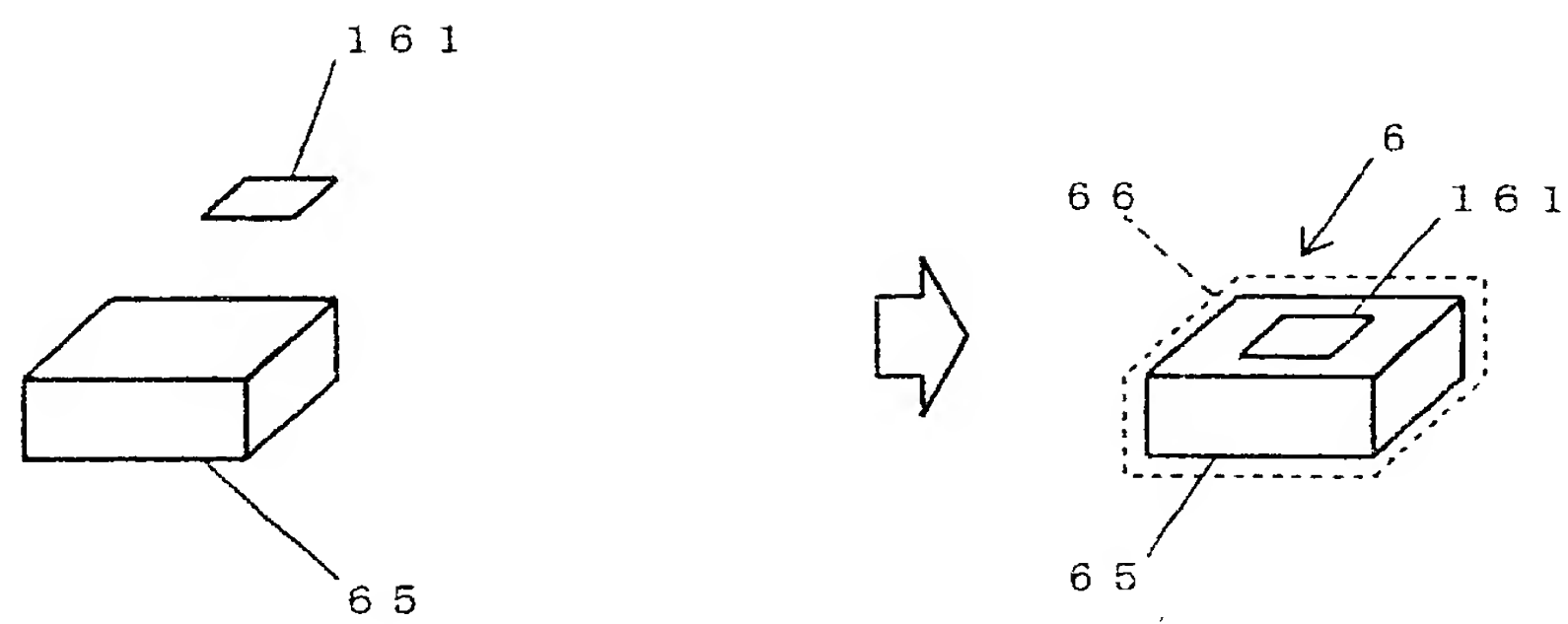


FIG. 22 (c)

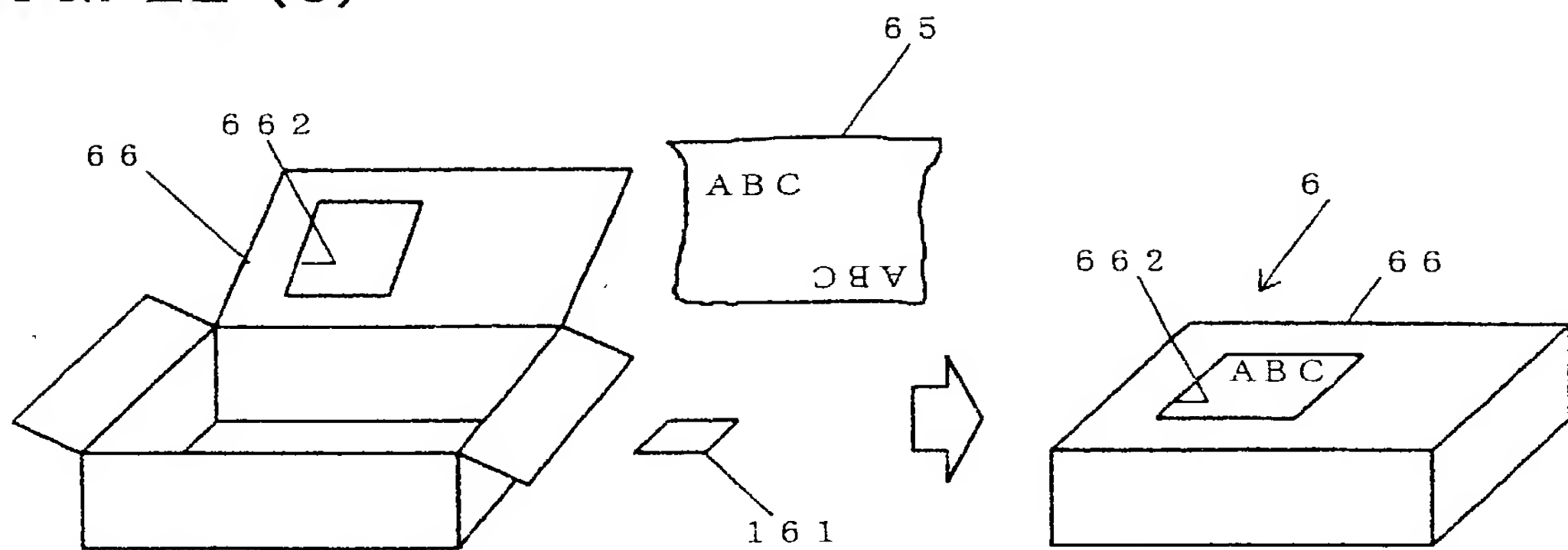


FIG. 23 (a)

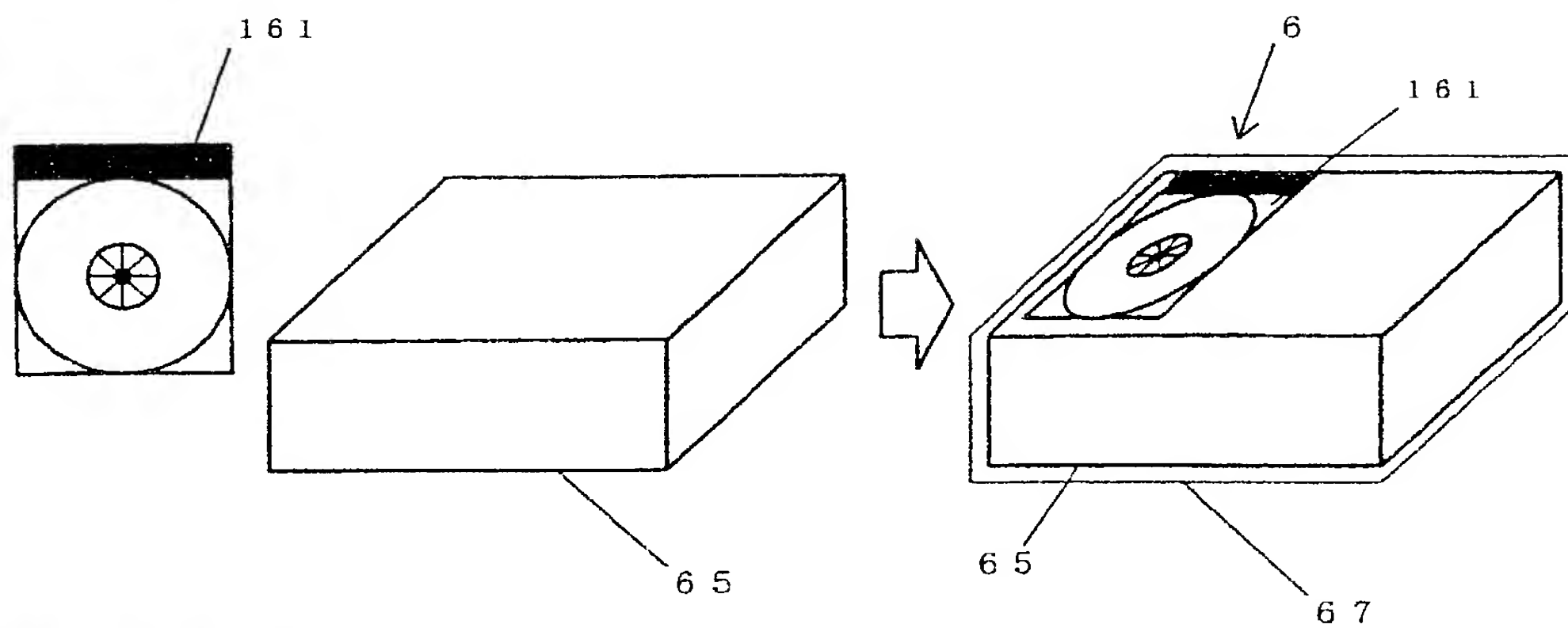


FIG. 23 (b)

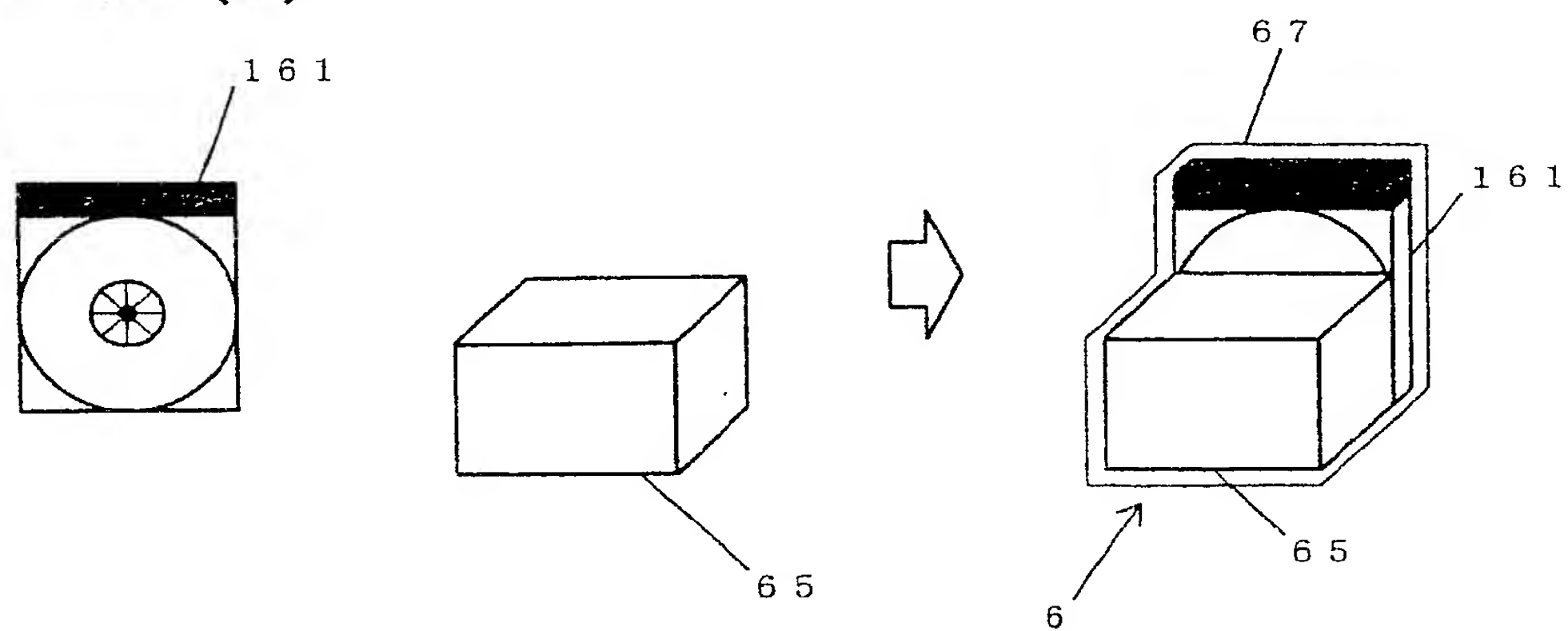


FIG. 23 (c)

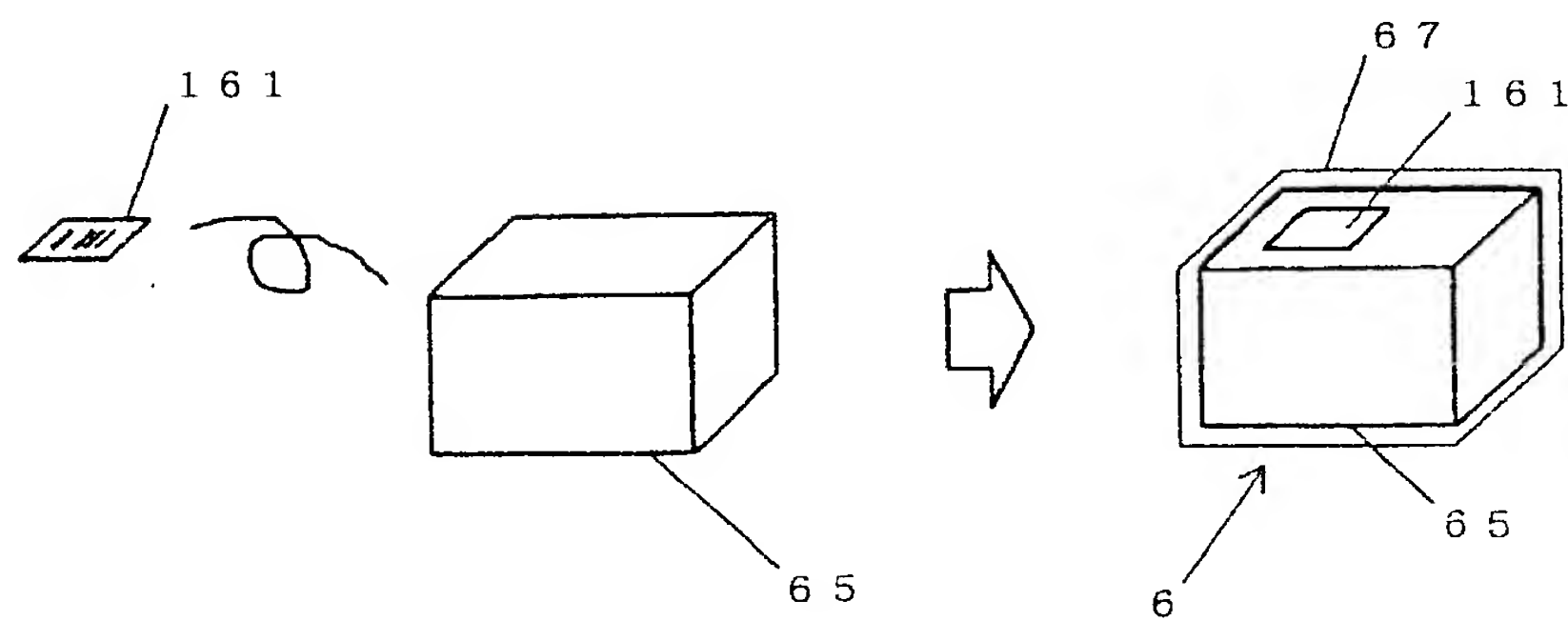


FIG. 24 (a)

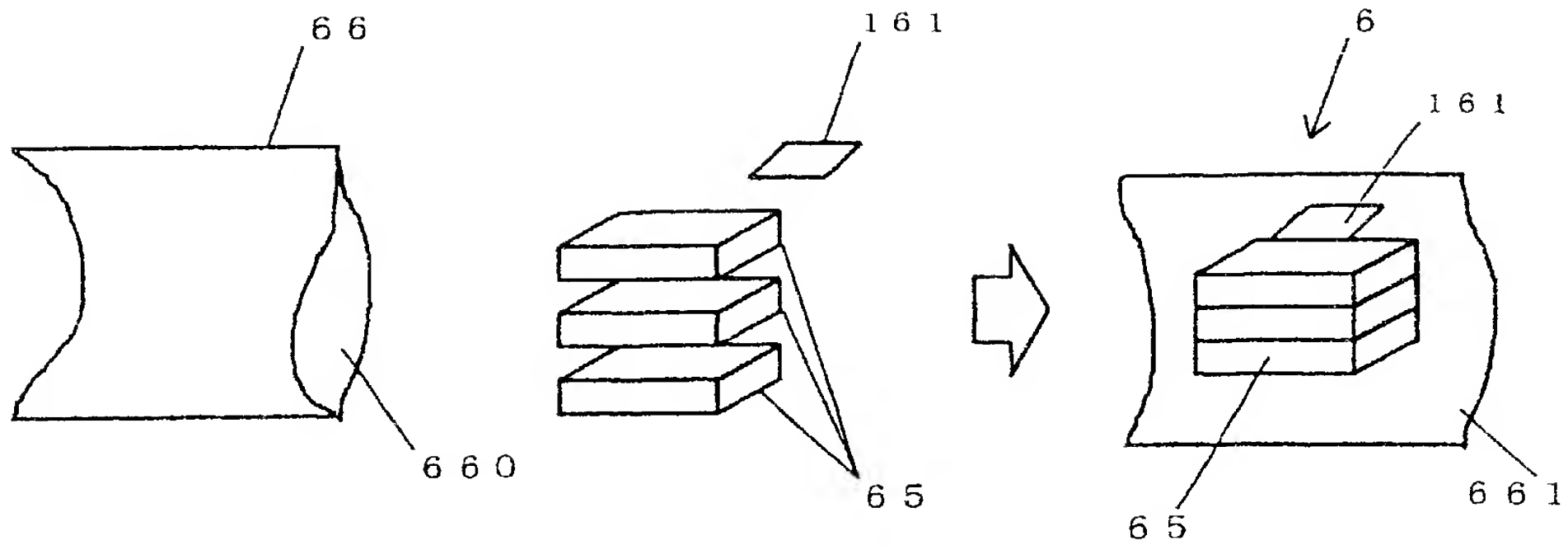


FIG. 24 (b)

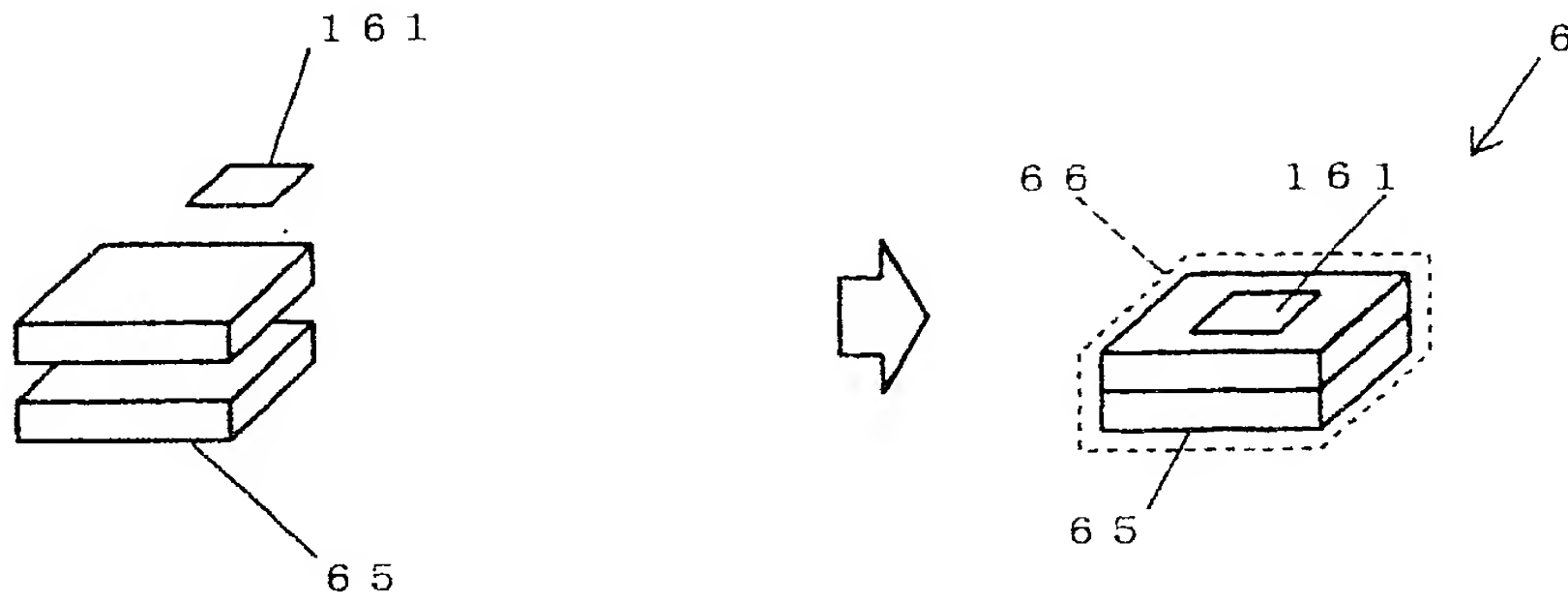


FIG. 24 (c)

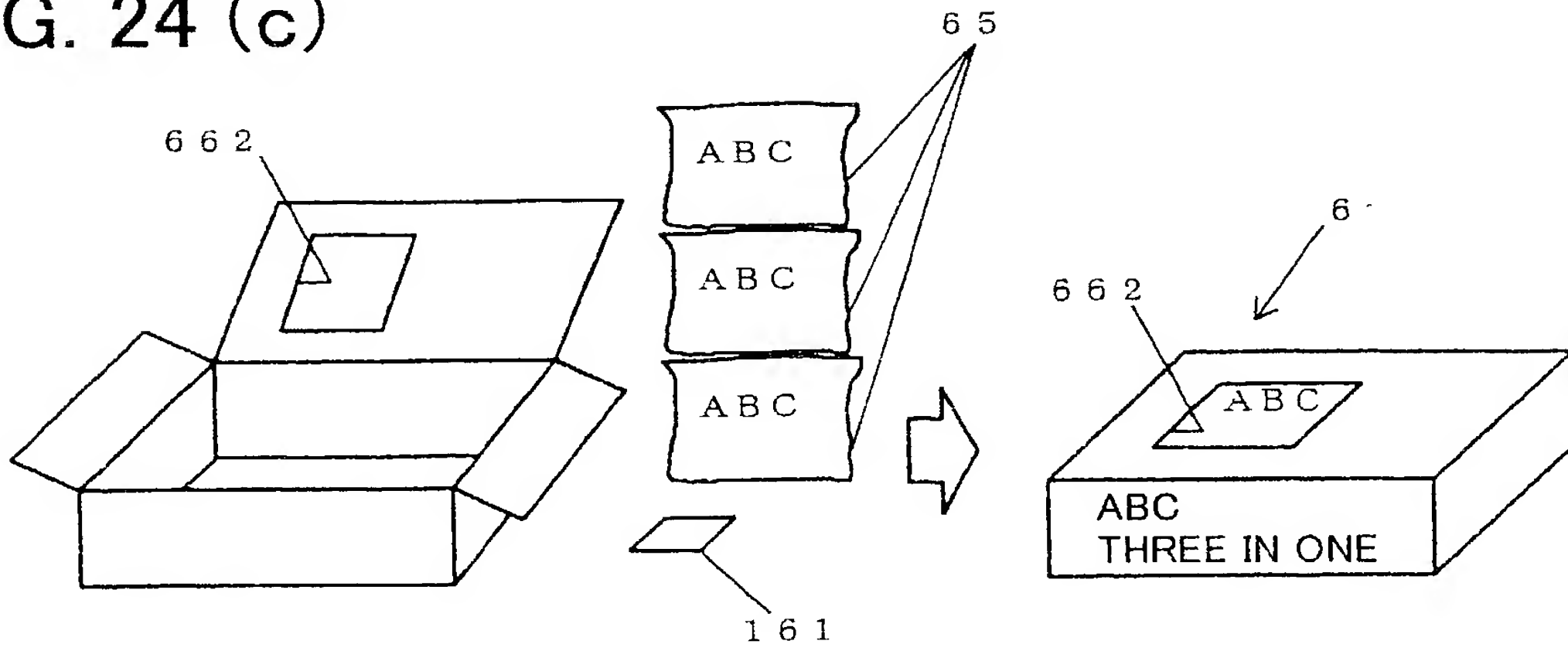




FIG. 25 (a)

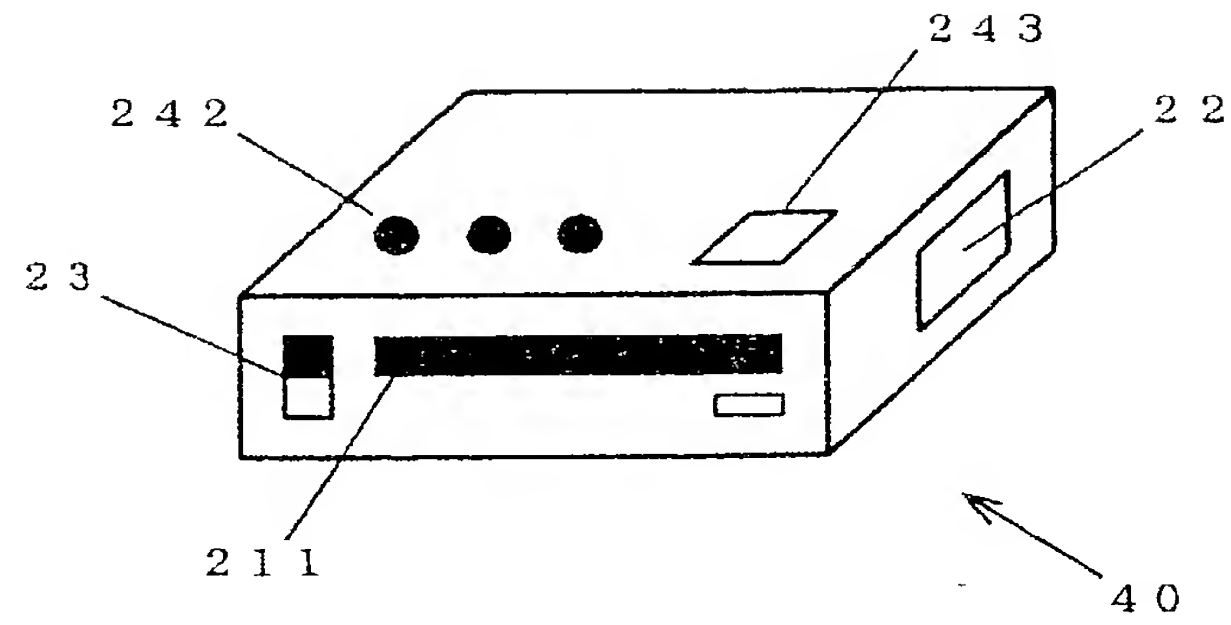


FIG. 25 (b)

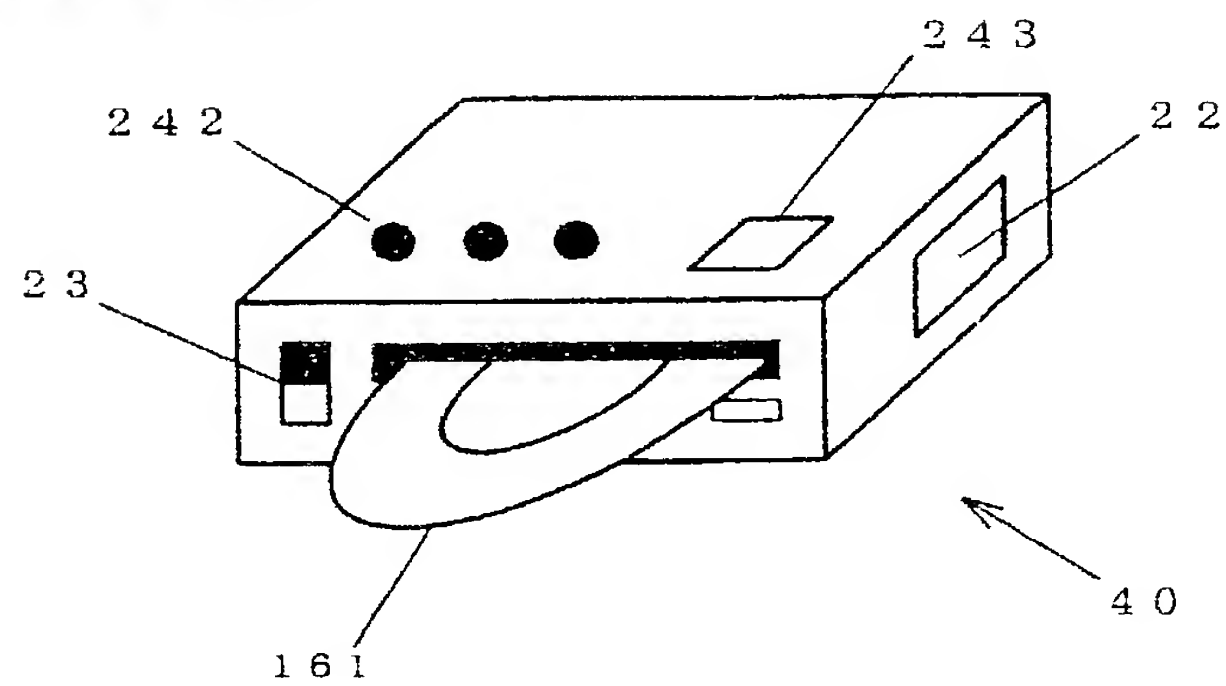


FIG. 25 (c)

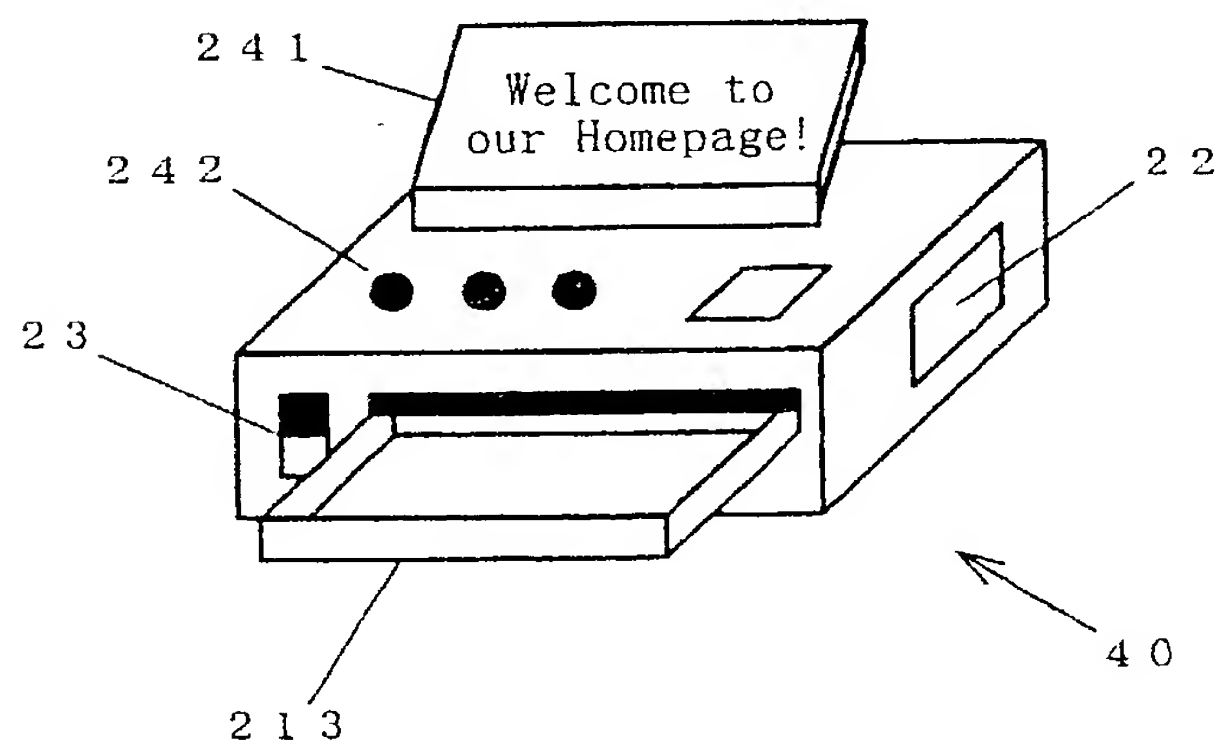


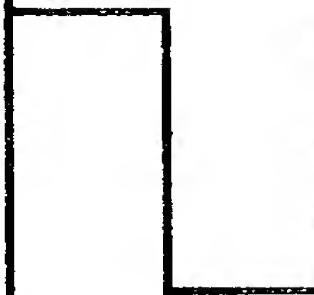
FIG. 26

TERMINAL STATION TABLE

TERMINAL STATION ID	CONTRACT SIGNER ID
000001	000001
000002	216320
000003	002560
000004	380905
000005	102611
.	
.	
.	
.	

CUSTOMER TABLE

CONTRACT SIGNER ID	NAME	REMARKS
000001	△△ △△	PRIVATE
000002	▲▲▲▲	PRIVATE
000003	○ ○○	CORPORATE
000004	□□ □□□	PRIVATE
000005		
.		
.		
.		





CONTRACT SIGNER ID : 000125

[illegible]

FIG. 29

CONTRACT SIGNER ID : 000125

SPARE ARTICLE DATA														
No.	DATE OF DELIVERY Td	DATE OF PURCHASE Tp	DATE OF COLLECTION Tc	FULL DATA (FULL DIGITS)	THIRD LEVEL						THE NUMBER OF TIMES COLLECTED N	PURCHASE STATUS		
					TOP LEVEL		SECOND LEVEL		THIRD LEVEL CODE	TITLE			REMARKS 1	REMARKS 2
					TOP LEVEL CODE	TOP LEVEL	SECOND LEVEL CODE	SECOND LEVEL						
1	3/1/2000	3/10/2000	—	0010 0000 0000 0101 0000	00	CD-ROM	10	APPLI-CATION SOFTWARE	0000	"DATA SEARCH"	DATA SEARCH, EXPLOITATION SOFTWARE	FOR PC USE	1	PURCHASED
2	3/1/2000	—	—	0010 0001 0000 0000 0100	00	CD-ROM	10	APPLI-CATION SOFTWARE	0001	"TRANSLATION ASSISTANT "	JAPANESE ENGLISH TRANSLATION ASSISTANT	"	1	NEW (SPARE)
3	3/1/2000	—	—	0010 0010 0000 0000 1100	00	CD-ROM	10	APPLI-CATION SOFTWARE	0010	"INTERNET SUPPORT"	INTERNET USABILITY ENHANCEMENT SOFTWARE	"	2	NEW (SPARE)
4	3/1/2000	—	—	1100 0000 0000 0000 0111	11	EMPTY MEDIUM	00	V H S	N/A	—	GENERAL USE (FIVE IN ONE PACK)	"	0	NEW (SPARE)
5	3/1/2000	3/18/2000	—	1101 0000 0000 0101 0001	11	EMPTY MEDIUM	01	D V	N/A	—	GENERAL USE (FIVE IN ONE PACK)	FOR "DIGITAL VIEW	2	PURCHASED
6														
7														
8														
9														
10														
11														

JAN 24 2002 09:23:02

FIG. 30

CONTRACT SIGNER ID : 000125

[illegible]



FIG.32

(PERIOD: FEBRUARY 16, 2000 – MARCH 15, 2000)

CONTRACT SIGNER ID:000125

## CONTRACT MODEL: GENERAL MACHINE

No.	PRODUCT	ACCOUNT FACTOR	DATE OF INSTALLATION	QUANTITY	UNIT PRICE	SUBTOTAL
1	APPLICATION SOFTWARE "Datahunter"	k1	3/10/2000	1	p1'	p1'*k1
2						
3						
4						
5						
TOTAL						△△△△. △

(PERIOD: MARCH 16, 2000 -APRIL 15, 2000 )

CONTRACT SIGNER ID:000125

CONTRACT MODEL:

No.	PRODUCT	ACCOUNT FACTOR	DATE OF INSTALLATION	QUANTITY	UNIT PRICE	SUBTOTAL
1	DV CASSETTE	k2	3/18/2000	1	p4'	p4' * k2
2						
3						
4						
5						
TOTAL						





FIG. 34

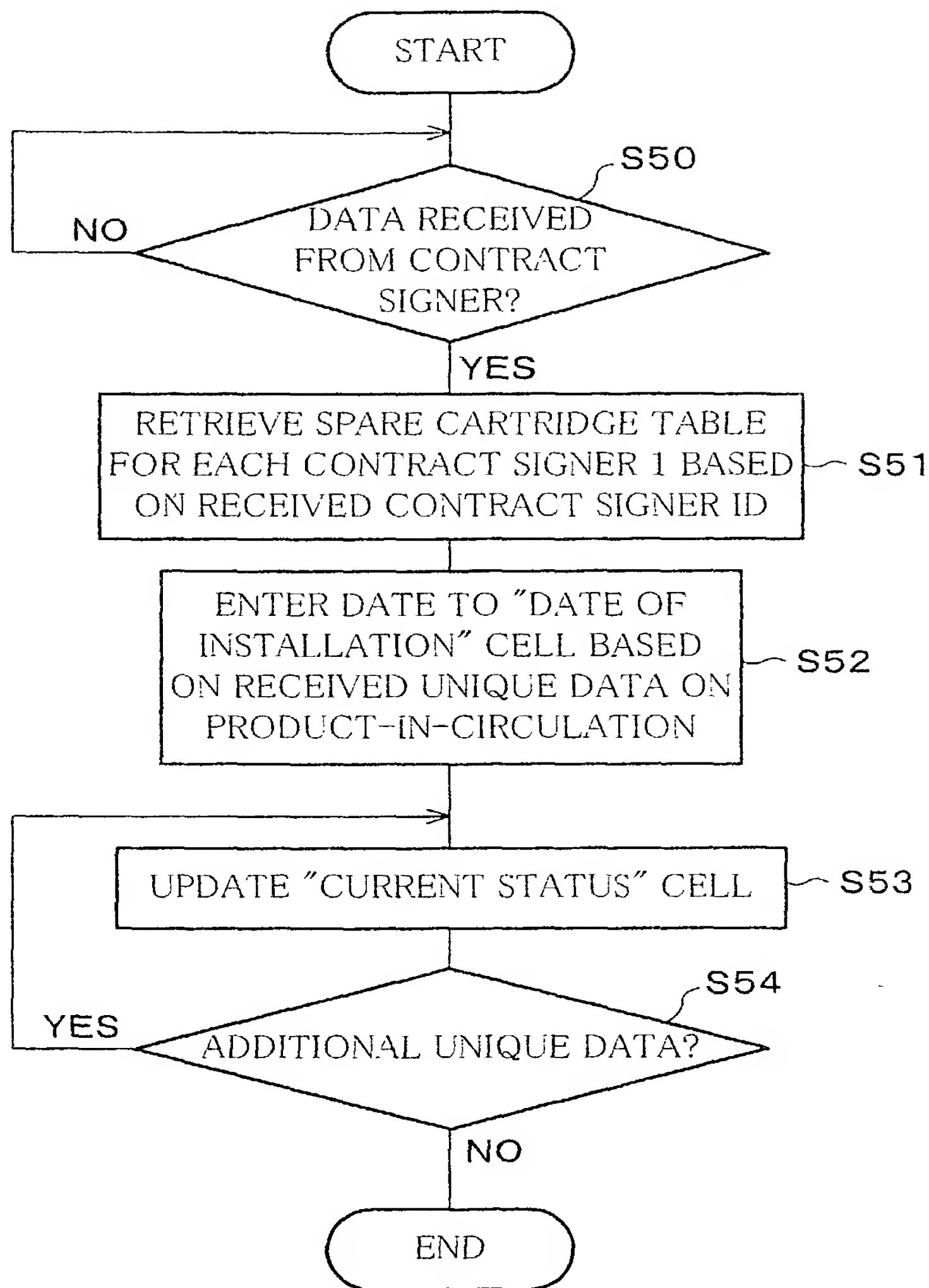


FIG. 35

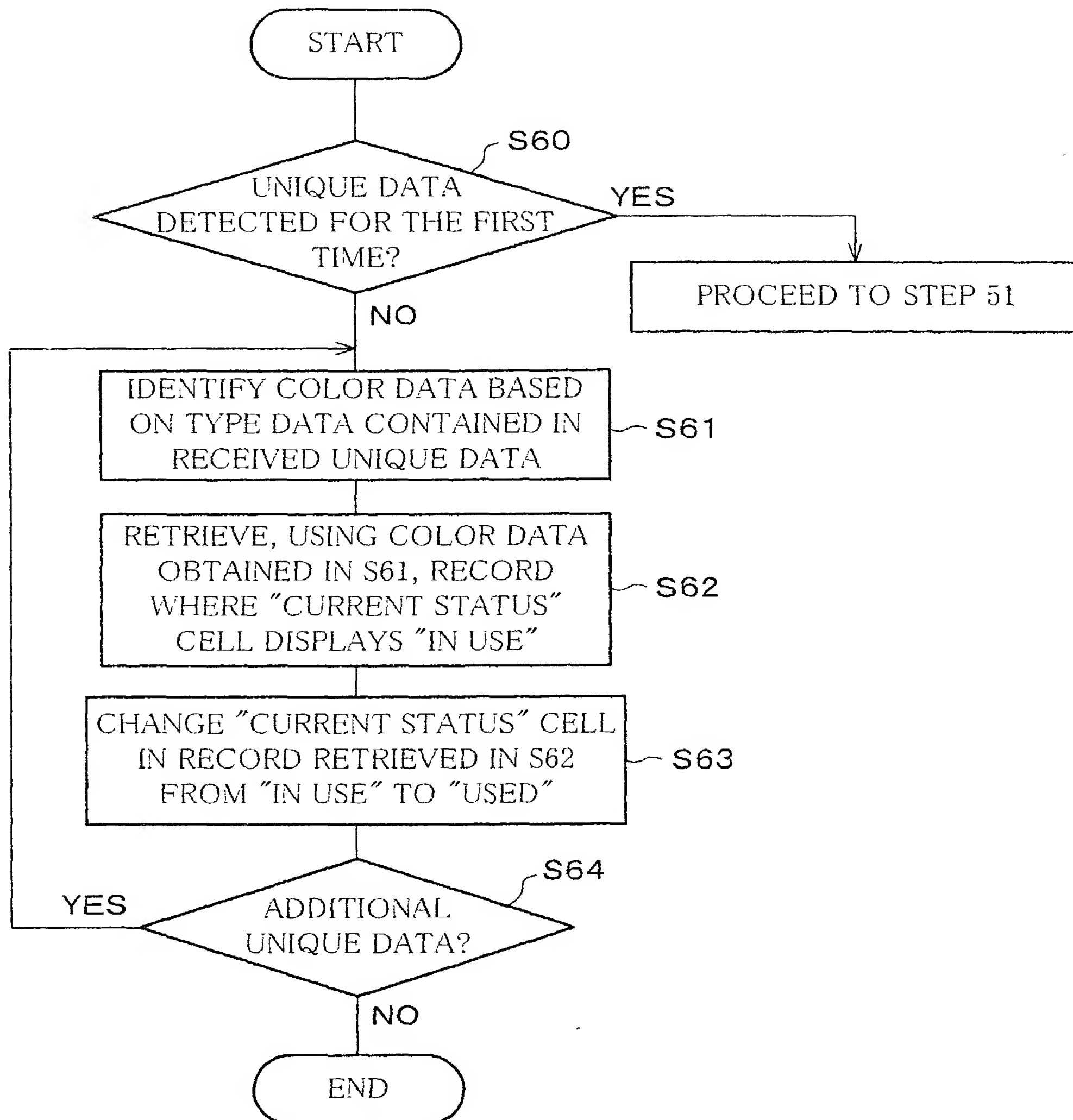


FIG. 36

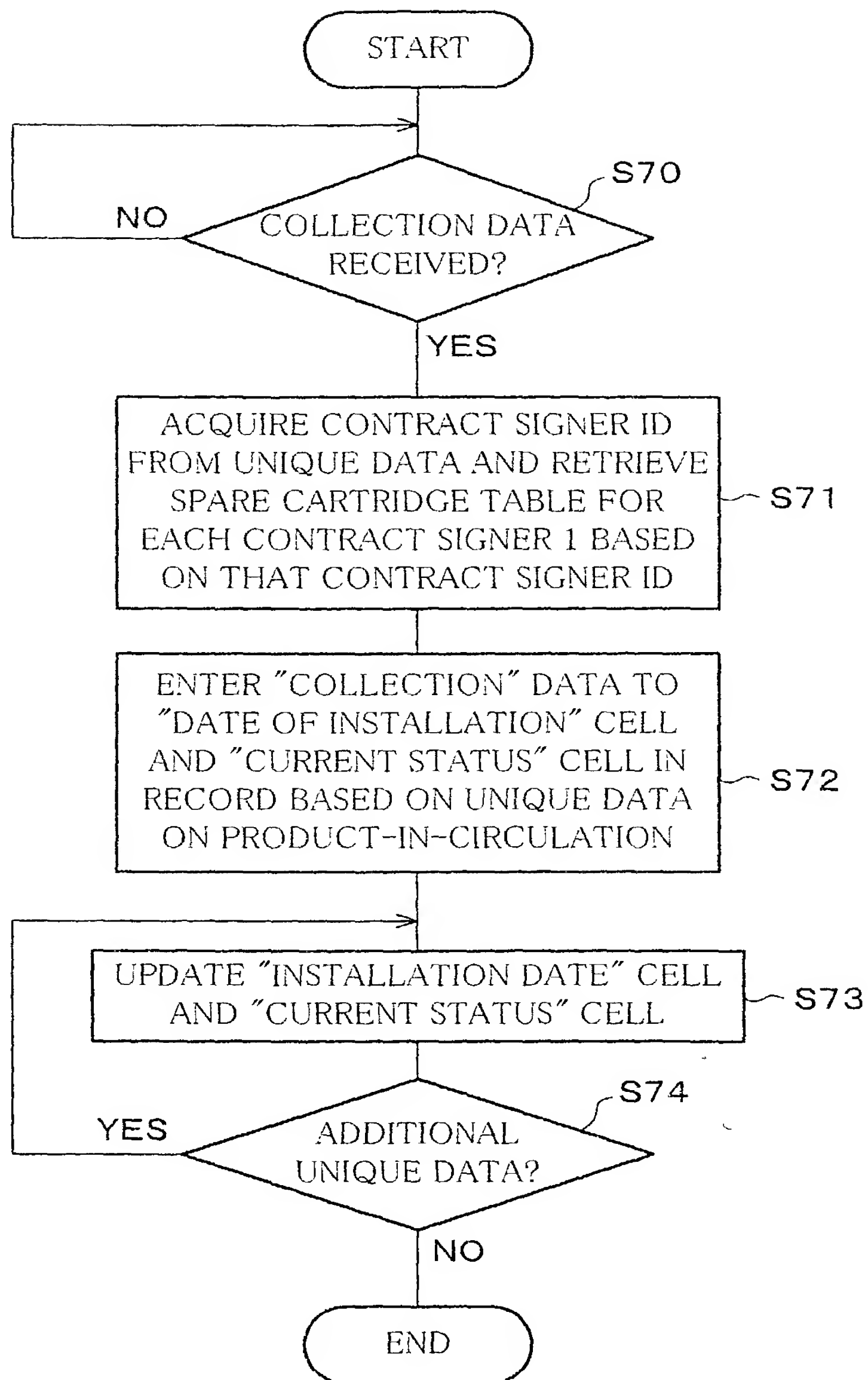
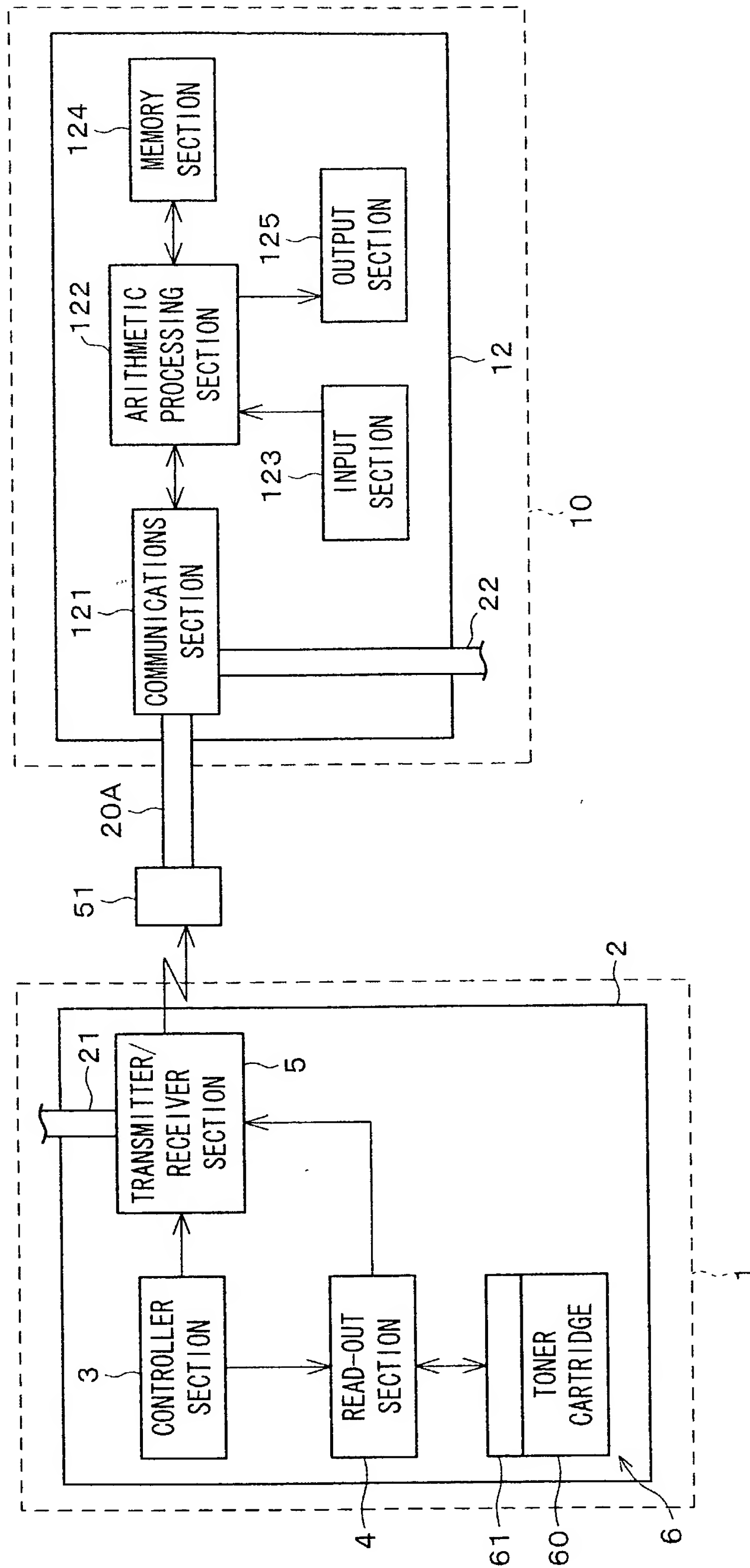


FIG. 37



REMOVAL

INSTALLATION

FIG. 38 (a)

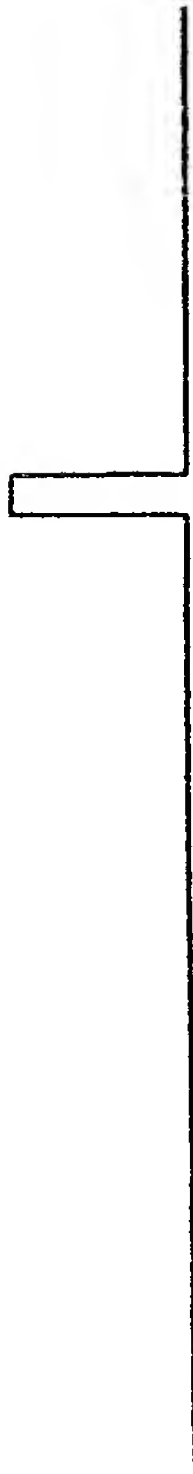
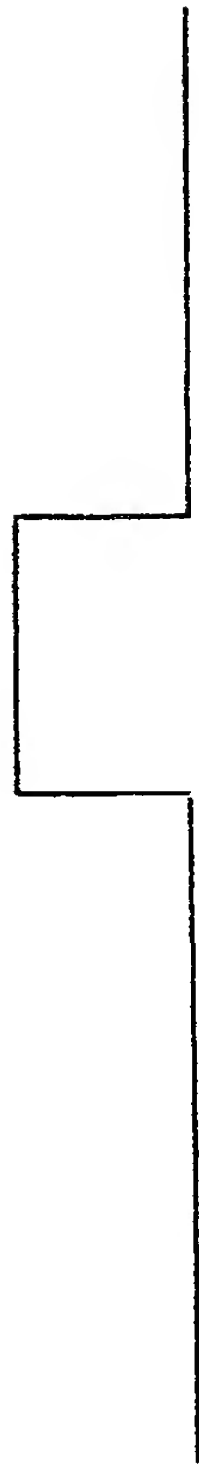
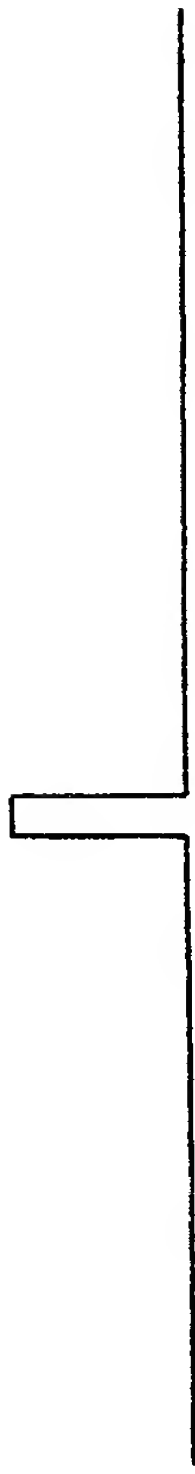
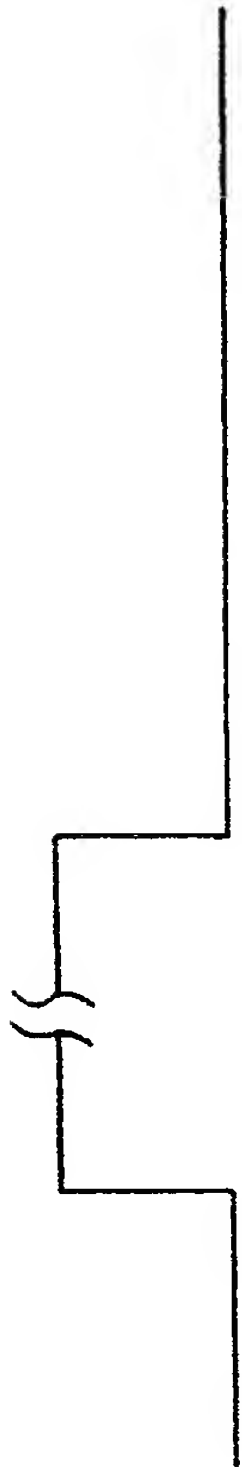
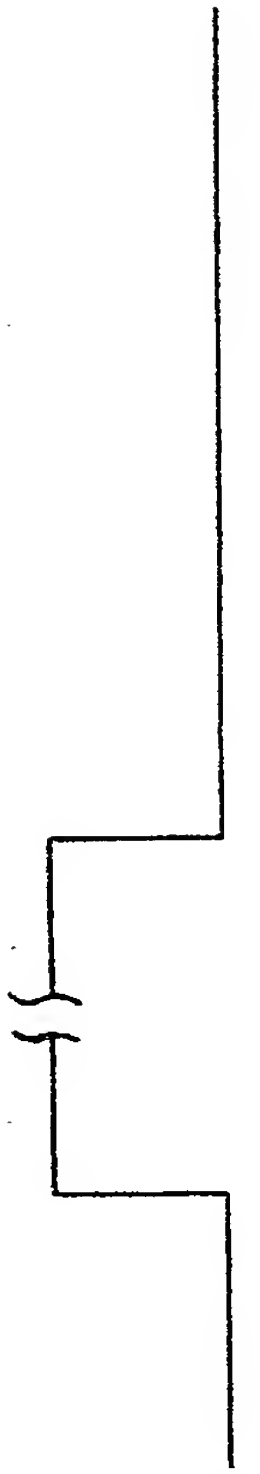
FIG. 38 (b)

FIG. 38 (c)

FIG. 38 (d)

FIG. 38 (e)

FIG. 38 (f)



Year	United States (%)	Japan (%)	Germany (%)
1950	7	7	15
1960	8	10	16
1970	10	15	17
1980	12	18	17.5
1990	13	19	18
2000	14	20	18
2010	14.5	20	18
2020	15	20	18

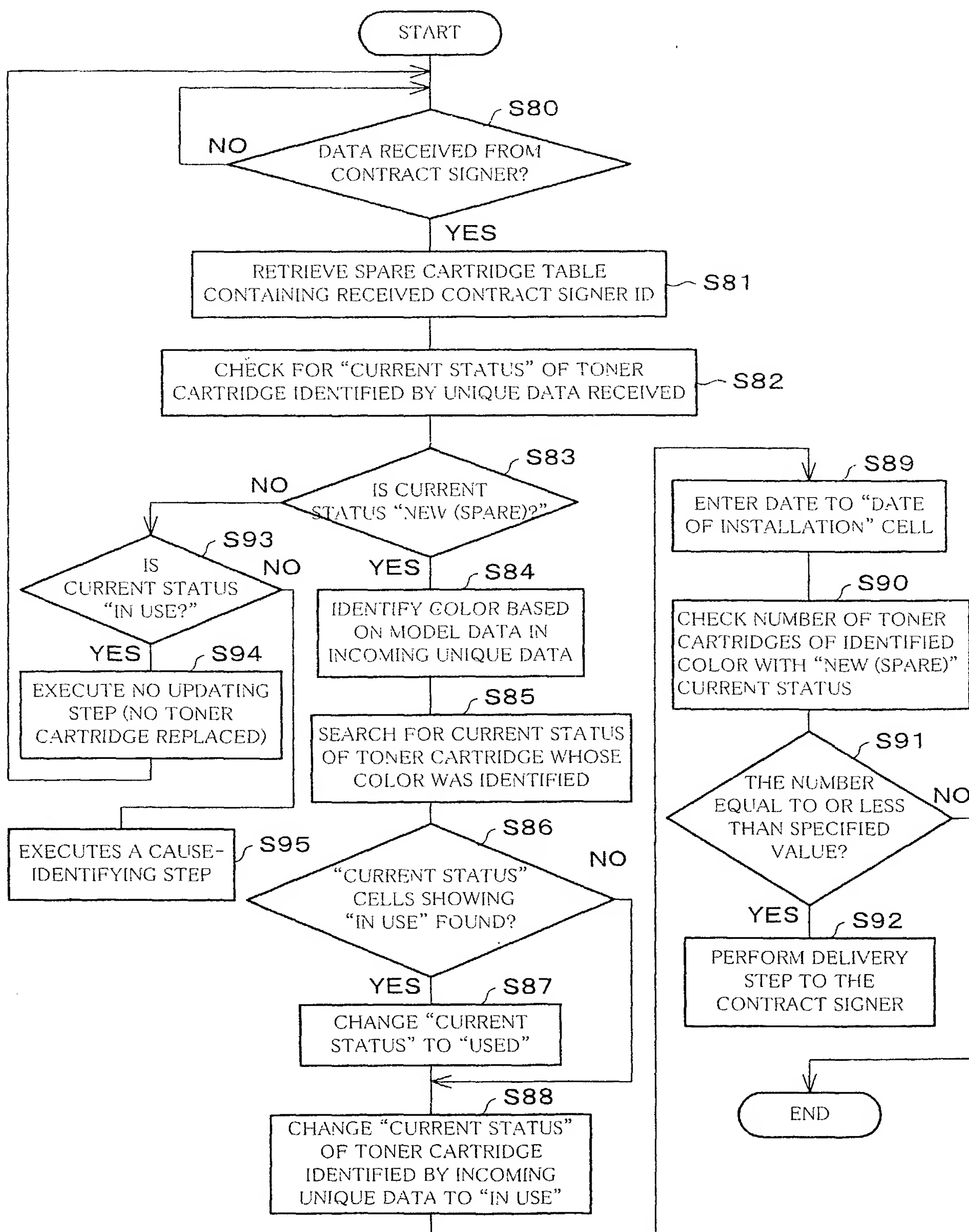


FIG. 40

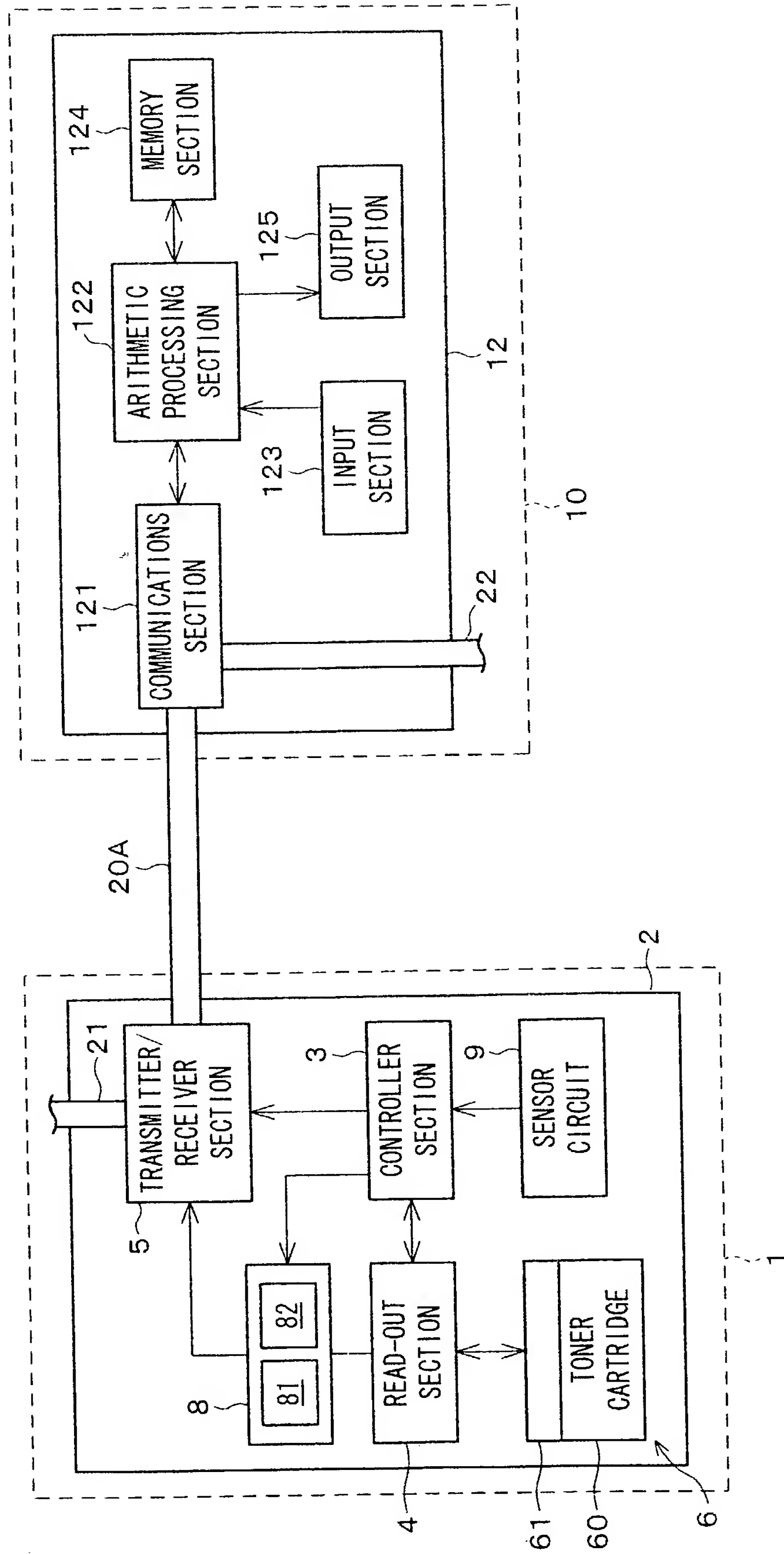




FIG. 41 (a)

ADVANCE REQUEST PAGE

ENTER YOUR CONTRACT SIGNER ID

SELECT ONE OR MORE PRODUCT GROUPS THAT YOU WISH TO BE  
DELIVERED IN ADVANCE.

☒ •OFFICE SUPPLIES

☒ •ENTERTAINMENT PRODUCTS

☐ •EVERYDAY COMMODITIES

. . . . .

FIG. 41 (b)

ADVANCE REQUEST PAGE

SELECT ONE OR MORE PRODUCTS THAT YOU WISH TO BE DELIVERED  
IN ADVANCE.

☒ • SOFTWARE FOR PC

☒ • WESTERN MOVIES (ON DVD)

☐ • JAPANESE MOVIES (ON DVD)

. . . . .




FIG. 41 (c)

```

    . . . .
<FORM ACTION=". . ."
  <INPUT TYPE="checkbox" NAME="0210">·SOFTWARE FOR PC<BR>
  <INPUT TYPE="checkbox" NAME="0220">·WESTERN MOVIES (ON DVD)<BR>
  <INPUT TYPE="checkbox" NAME="0230">·JAPANESE MOVIES (ON DVD)<BR>
    . . .

</FORM>
    . . . .

```

FIG. 41 (d)

DATA	NUMBER OF REPLIES
0210	84
0220	173
0230	50
...	

FIG. 41 (e)

DATA	ARTICLE NAME
0210	SOFTWARE FOR PC
0220	WESTERN MOVIES (ON DVD)
0230	JAPANESE MOVIES (ON DVD)
...	

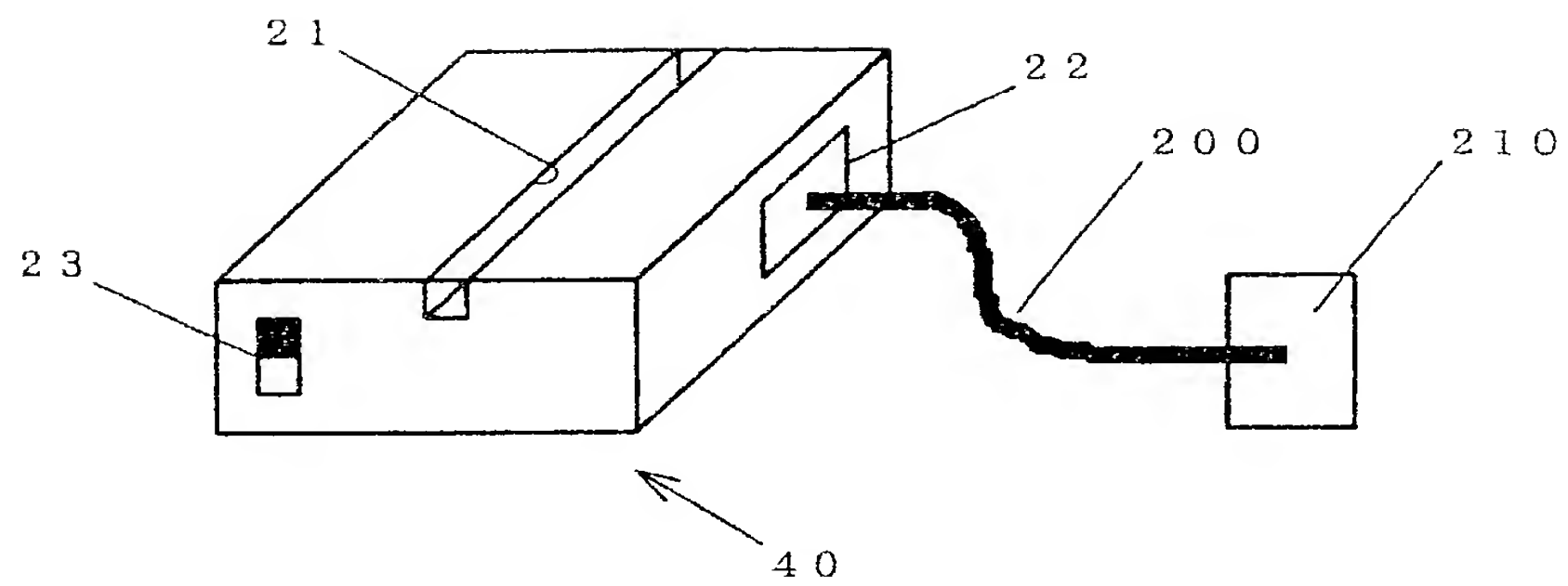


FIG. 43 (a)

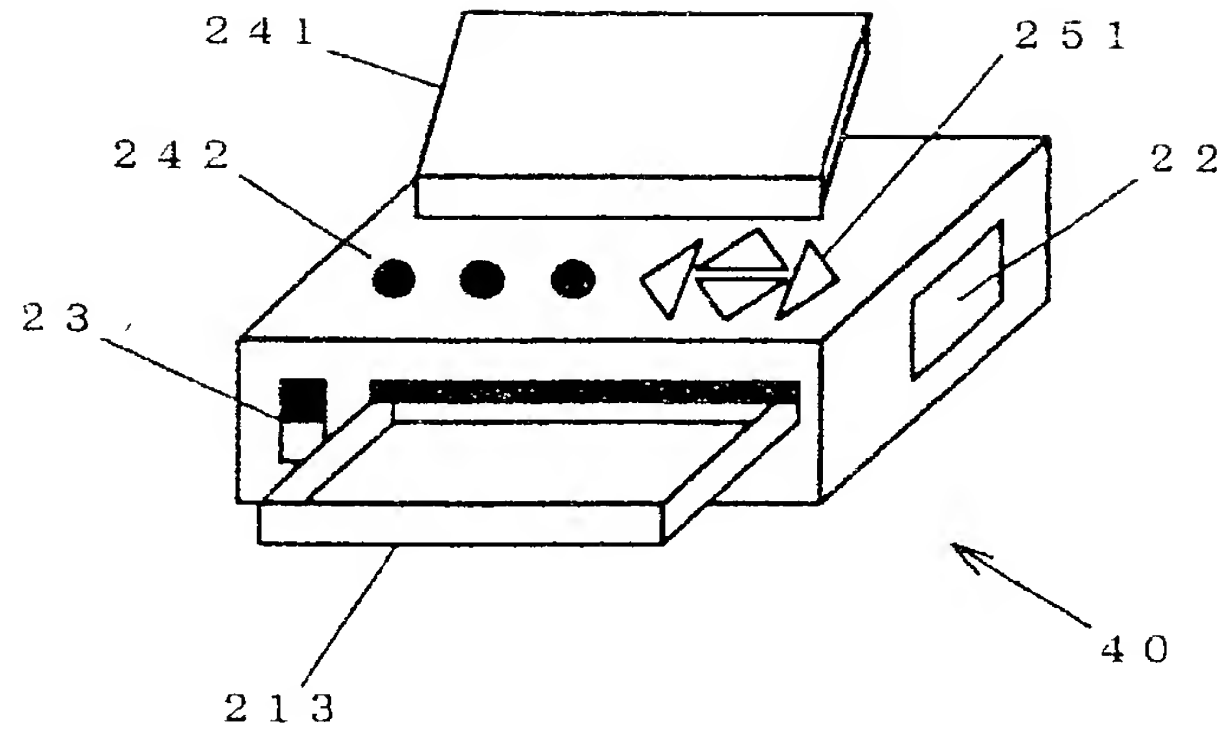


FIG. 43 (b)

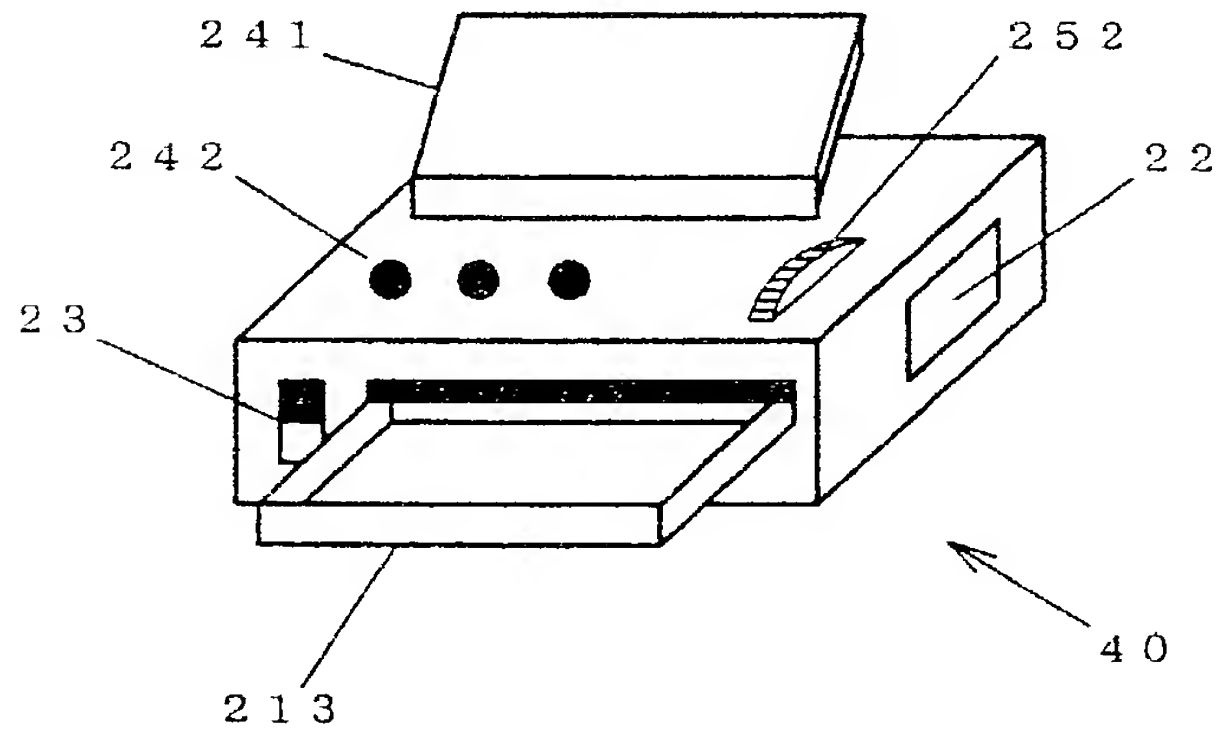
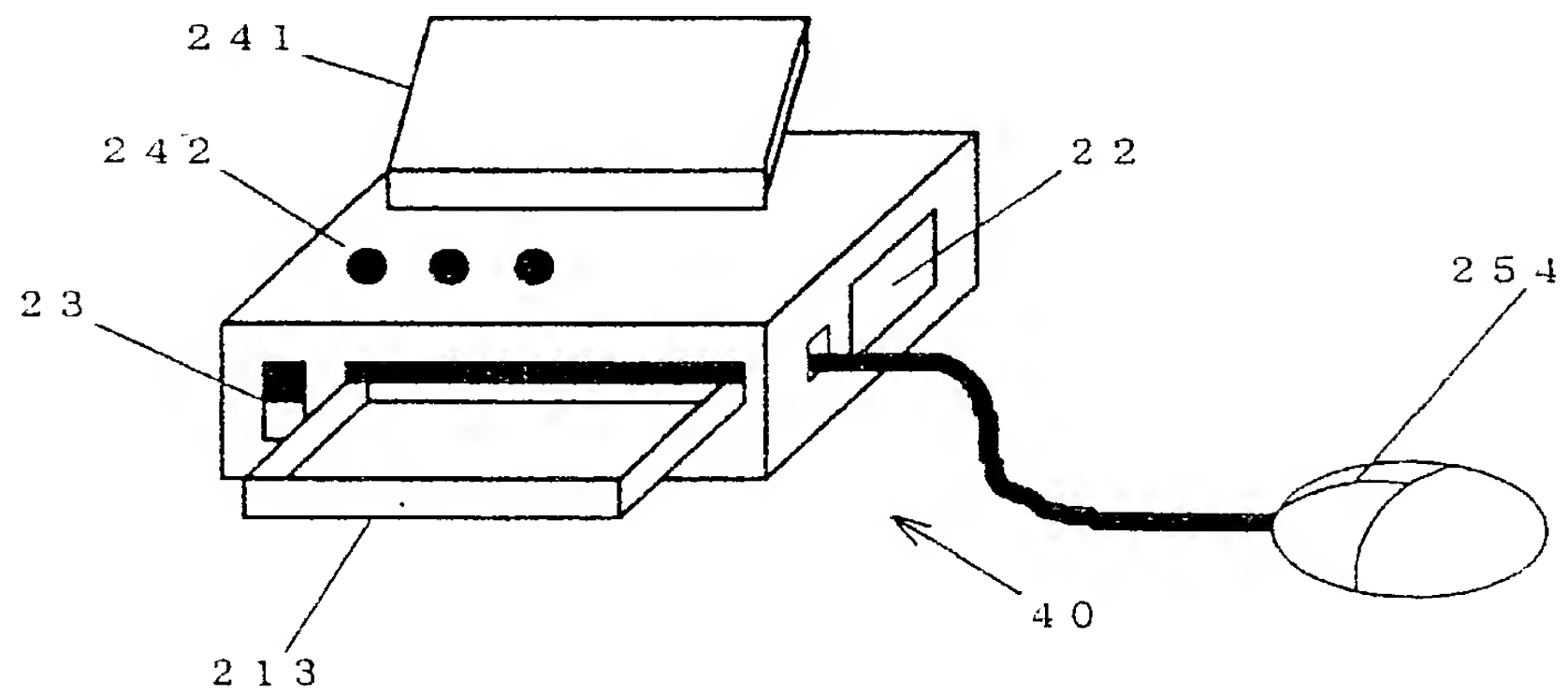
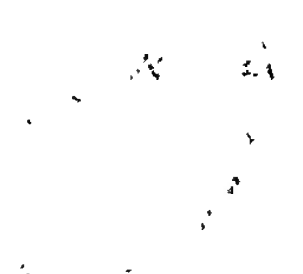


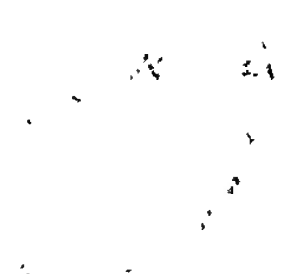
FIG. 43 (c)



1994



1994



1994

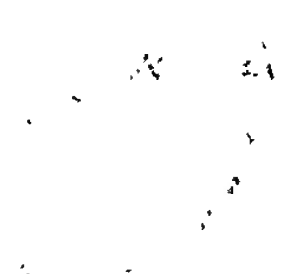


FIG.46(a)

PRODUCT-IN-CIRCULATION TABLE [1]

CURRENT DATA AND TIME Tp: 10/28/2000

UNIQUE DATA	REMARKS ON PRODUCT-IN-CIRCULATION TABLE	"USE-BY" DATE T	ACCOUNTING
0000 0000 0000 0101 0000	BLACK TONER CARTRIDGE FOR AR-2000	5/14/2000	CHARGED
0000 0000 0000 0101 0001		5/14/2000	UNCHARGED
0000 0000 0000 0101 0010		5/14/2000	UNCHARGED
...		...	...
0100 0000 0000 0000 0100	YELLOW TONER CARTRIDGE FOR AR-2000	11/1/2001	CHARGED
0100 0000 0000 0000 0101		11/1/2001	UNCHARGED
...		...	...
0100 0000 0000 0000 1100	MAGENTA TONER CARTRIDGE FOR AR-2000	11/1/2001	CHARGED
0100 0000 0000 0000 1101		11/1/2001	UNCHARGED
...		...	...
1100 0000 0000 0000 0111	CYAN TONER CARTRIDGE FOR AR-2000	11/1/2001	CHARGED
1100 0000 0000 0000 1000		11/1/2001	UNCHARGED
...	...	...	...

FIG.46(b)

PRODUCT-IN-CIRCULATION TABLE [2]

CURRENT DATA AND TIME Tp: 10/28/2000

UNIQUE DATA	REMARKS	"USE-BY" DATE T	ACCOUNTING
...	...	...	...
0010 0000 0000 0000 0000	APPLICATION SOFTWARE "DATA SEARCH" Ver. 1.0	12/31/2000	CHARGED
0010 0000 0000 0000 0001			UNCHARGED
0010 0000 0000 0000 0010			UNCHARGED
...			...
0010 0000 0000 1000 0000	APPLICATION SOFTWARE "DATA SEARCH" Ver. 2.0	5/31/2001	CHARGED
0010 0000 0000 1000 0001			CHARGED
0010 0000 0000 1000 0010			UNCHARGED
...			...
...	...	...	...
0010 0001 0000 0000 0000	APPLICATION SOFTWARE "TRANSLATION ASSISTANT"	7/1/2001	CHARGED
0010 0001 0000 0000 0001			CHARGED
0010 0001 0000 0000 0010			UNCHARGED
...			...



FIG. 48 ( a ) INSTALLED CARTRIDGE DATA

MACHINE MODEL AR-2000 LIBRE

CONTRACT SIGNER ID 000125

CARTRIDGE TYPE	DATE OF REPLACEMENT	INSTALLED CARTRIDGE DATA				DATE OF EXPIRY T	TIME REMAINING BEFORE EXPIRY Tr	CORRESPONDING SPARE CARTRIDGE No.
		FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA			
BLACK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
YELLOW	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MAGENTA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CYAN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PHOTOSENSITIVE BODY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

FIG. 48 ( b ) SPARE CARTRIDGE DATA

MACHINE MODEL AR-2000 LIBRE

CONTRACT SIGNER ID 000125

DATE 03/22/2000/15:58

No.	DATE OF DELIVERY	DATE OF INSTALLATION	SPARE CARTRIDGE DATA				CURRENT STATUS	DATE OF EXPIRY T	TIME REMAINING BEFORE EXPIRY Tr
			FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA			
1	3/22/2000	—	0000 0000 0000 0101 0000	BLACK TONER(00)	AR-2000	0000 0000 0101 0000	NEW (SPARE)	5/14/2000	Tr 3
2	3/22/2000	—	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	NEW (SPARE)	11/1/2001	Tr 1
3	3/22/2000	—	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	NEW (SPARE)	11/1/2001	Tr 1
4	3/22/2000	—	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	NEW (SPARE)	11/1/2001	Tr 1
5	3/22/2000	—	0000 0000 0000 0101 0001	BLACK TONER(00)	AR-2000	0000 0000 0101 0001	NEW (SPARE)	12/14/2000	Tr 1
6	3/22/2000	—	0100 0000 0000 0000 0101	YELLOW TONER(01)	AR-2000	0000 0000 0000 0101	NEW (SPARE)	11/1/2001	Tr 1
7	3/22/2000	—	1000 0000 0000 0000 1101	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1101	NEW (SPARE)	11/1/2001	Tr 1
8	3/22/2000	—	1100 0000 0000 0000 1000	CYAN TONER(11)	AR-2000	0000 0000 0000 1000	NEW (SPARE)	11/1/2001	Tr 1
9									
10									

3 0000 0000 0000 0000 0000



FIG. 49 ( a ) INSTALLED CARTRIDGE DATA

MACHINE MODEL		AR-2000		LIBRE					
CONTRACT SIGNER ID		000125							
CARTRIDGE TYPE	DATE OF REPLACEMENT	INSTALLED CARTRIDGE DATA				DATE OF EXPIRY T	TIME REMAINING BEFORE EXPIRY Tr	CORRESPONDING SPARE CARTRIDGE No.	
		FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA				
	BLACK	3/22/2000	0000 0000 0000 0101 0000	BLACK TONER(00)	AR-2000	0000 0000 0101 0000	5/14/2000	Tr 3	1 (No. 1)
	YELLOW	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	11/1/2001	Tr 1	1 (No. 2)
	MAGENTA	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	11/1/2001	Tr 1	1 (No. 3)
CYAN	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	11/1/2001	Tr 1	1 (No. 4)	
PHOTOSENSITIVE BODY		N/A	N/A	N/A	N/A	N/A	N/A	N/A	

FIG. 49 ( b ) SPARE CARTRIDGE DATA

MACHINE MODEL

AR-2000 LIBRE

DATE

03/22/2000/15:58

CONTRACT SIGNER ID

000125

No.	DATE OF DELIVERY	DATE OF INSTALLATION	SPARE CARTRIDGE DATA				CURRENT STATUS	DATE OF EXPIRY T	TIME REMAINING BEFORE EXPIRY T1
			FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA			
1	3/22/2000	3/22/2000	0000 0000 0000 0101 0000	BLACK TONER(00)	AR-2000	0000 0000 0101 0000	IN USE	5/14/2000	Tr 3
2	3/22/2000	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	IN USE	11/1/2001	Tr 1
3	3/22/2000	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	IN USE	11/1/2001	Tr 1
4	3/22/2000	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	IN USE	11/1/2001	Tr 1
5	3/22/2000	--	0000 0000 0000 0101 0001	BLACK TONER(00)	AR-2000	0000 0000 0101 0001	NEW (SPARE)	12/14/2000	Tr 1
6	3/22/2000	--	0100 0000 0000 0000 0101	YELLOW TONER(01)	AR-2000	0000 0000 0000 0101	NEW (SPARE)	11/1/2001	Tr 1
7	3/22/2000	--	1000 0000 0000 0000 1101	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1101	NEW (SPARE)	11/1/2001	Tr 1
8	3/22/2000	--	1100 0000 0000 0000 1000	CYAN TONER(11)	AR-2000	0000 0000 0000 1000	NEW (SPARE)	11/1/2001	Tr 1
9	.								
10	.								



FIG. 50 (a) INSTALLED CARTRIDGE DATA

MACHINE MODEL		AR-2000		LIBRE					
CONTRACT SIGNER ID		000125							
CARTRIDGE TYPE	DATE OF REPLACEMENT	INSTALLED CARTRIDGE DATA				DATE OF EXPIRY T	TIME REMAINING BEFORE EXPIRY Tr	CORRESPONDING SPARE CARTRIDGE No.	
		FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA				
	BLACK	6/12/2000	0000 0000 0000 0101 0001	BLACK TONER(00)	AR-2000	0000 0000 0101 0001	12/14/2000	Tr 1	0 (No. 5)
	YELLOW	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	11/1/2001	Tr 1	1 (No. 2)
	MAGENTA	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	11/1/2001	Tr 1	1 (No. 3)
CYAN	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	11/1/2001	Tr 1	1 (No. 4)	
PHOTOSENSITIVE BODY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

FIG. 50 (b) SPARE CARTRIDGE DATA

MACHINE MODEL		AR-2000 LIBRE		DATE		03/22/2000/15.58			
CONTRACT SIGNER ID		000125							
No.	DATE OF DELIVERY	DATE OF INSTALLATION	SPARE CARTRIDGE DATA				CURRENT STATUS	DATE OF EXPIRY T	TIME REMAINING BEFORE EXPIRY Tr
			FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA			
1	3/22/2000	3/22/2000	0000 0000 0000 0101 0000	BLACK TONER(00)	AR-2000	0000 0000 0101 0000	USED	5/14/2000	Tr 3
2	3/22/2000	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	IN USE	11/1/2001	Tr 1
3	3/22/2000	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	IN USE	11/1/2001	Tr 1
4	3/22/2000	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	IN USE	11/1/2001	Tr 1
5	3/22/2000	6/12/2000	0000 0000 0000 0101 0001	BLACK TONER(00)	AR-2000	0000 0000 0101 0001	IN USE	12/14/2000	Tr 1
6	3/22/2000	--	0100 0000 0000 0000 0101	YELLOW TONER(01)	AR-2000	0000 0000 0000 0101	NEW (SPARE)	11/1/2001	Tr 1
7	3/22/2000	--	1000 0000 0000 0000 1101	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1101	NEW (SPARE)	11/1/2001	Tr 1
8	3/22/2000	--	1100 0000 0000 0000 1000	CYAN TONER(11)	AR-2000	0000 0000 0000 1000	NEW (SPARE)	11/1/2001	Tr 1
9	.								
10	.								

FIG. 51 ( a ) INSTALLED CARTRIDGE DATA

MACHINE MODEL AR-2000 LIBRE									
CONTRACT SIGNER ID 000125									
CARTRIDGE TYPE	DATE OF REPLACEMENT	INSTALLED CARTRIDGE DATA				DATE OF EXPIRY T	TIME REMAINING BEFORE EXPIRY Tr	CORRESPONDING SPARE CARTRIDGE No.	
		FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA				
	BLACK	6/12/2000	0000 0000 0000 0101 0001	BLACK TONER(00)	AR-2000	0000 0000 0101 0001	12/14/2000	Tr 1	1 (No. 5)
	YELLOW	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	11/1/2001	Tr 1	1 (No. 2)
	MAGENTA	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	11/1/2001	Tr 1	1 (No. 3)
CYAN	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	11/1/2001	Tr 1	1 (No. 4)	
PHOTOSENSITIVE BODY	N/A	N/A	N/A	N/A	N/A	N/A		N/A	

FIG. 51 ( b ) SPARE CARTRIDGE DATA

03/22/2000/15:58

DATE

MACHINE MODEL AR-2000 LIBRE

CONTRACT SIGNER ID 000125

No.	DATE OF DELIVERY	DATE OF INSTALLATION	SPARE CARTRIDGE DATA					CURRENT STATUS	DATE OF EXPIRY Tr	TIME REMAINING BEFORE EXPIRY Tr
			FULL DATA (FULL DIGITS)	COLOR DATA (FIRST TWO DIGITS)	MODEL DATA	UNIQUE DATA				
1	3/22/2000	3/22/2000	0000 0000 0000 0101 0000	BLACK TONER(00)	AR-2000	0000 0000 0101 0000	USED	5/14/2000	Tr 3	
2	3/22/2000	3/22/2000	0100 0000 0000 0000 0100	YELLOW TONER(01)	AR-2000	0000 0000 0000 0100	IN USE	11/1/2001	Tr 1	
3	3/22/2000	3/22/2000	1000 0000 0000 0000 1100	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1100	IN USE	11/1/2001	Tr 1	
4	3/22/2000	3/22/2000	1100 0000 0000 0000 0111	CYAN TONER(11)	AR-2000	0000 0000 0000 0111	IN USE	11/1/2001	Tr 1	
5	3/22/2000	6/12/2000	0000 0000 0000 0101 0001	BLACK TONER(00)	AR-2000	0000 0000 0101 0001	IN USE	12/14/2000	Tr 1	
6	3/22/2000	COLLECTED	0100 0000 0000 0000 0101	YELLOW TONER(01)	AR-2000	0000 0000 0000 0101	COLLECTED	—	—	
7	3/22/2000	COLLECTED	1000 0000 0000 0000 1101	MAGENTA TONER(10)	AR-2000	0000 0000 0000 1101	COLLECTED	—	—	
8	3/22/2000	COLLECTED	1100 0000 0000 0000 1000	CYAN TONER(11)	AR-2000	0000 0000 0000 1000	COLLECTED	—	—	
9	6/20/2000	—	0000 0000 0000 0101 0010	BLACK TONER(00)	AR-2000	0000 0000 0101 0010	NEW (SPARE)	12/14/2000	Tr 2	
10										

31000724004 005023415

FIG. 52

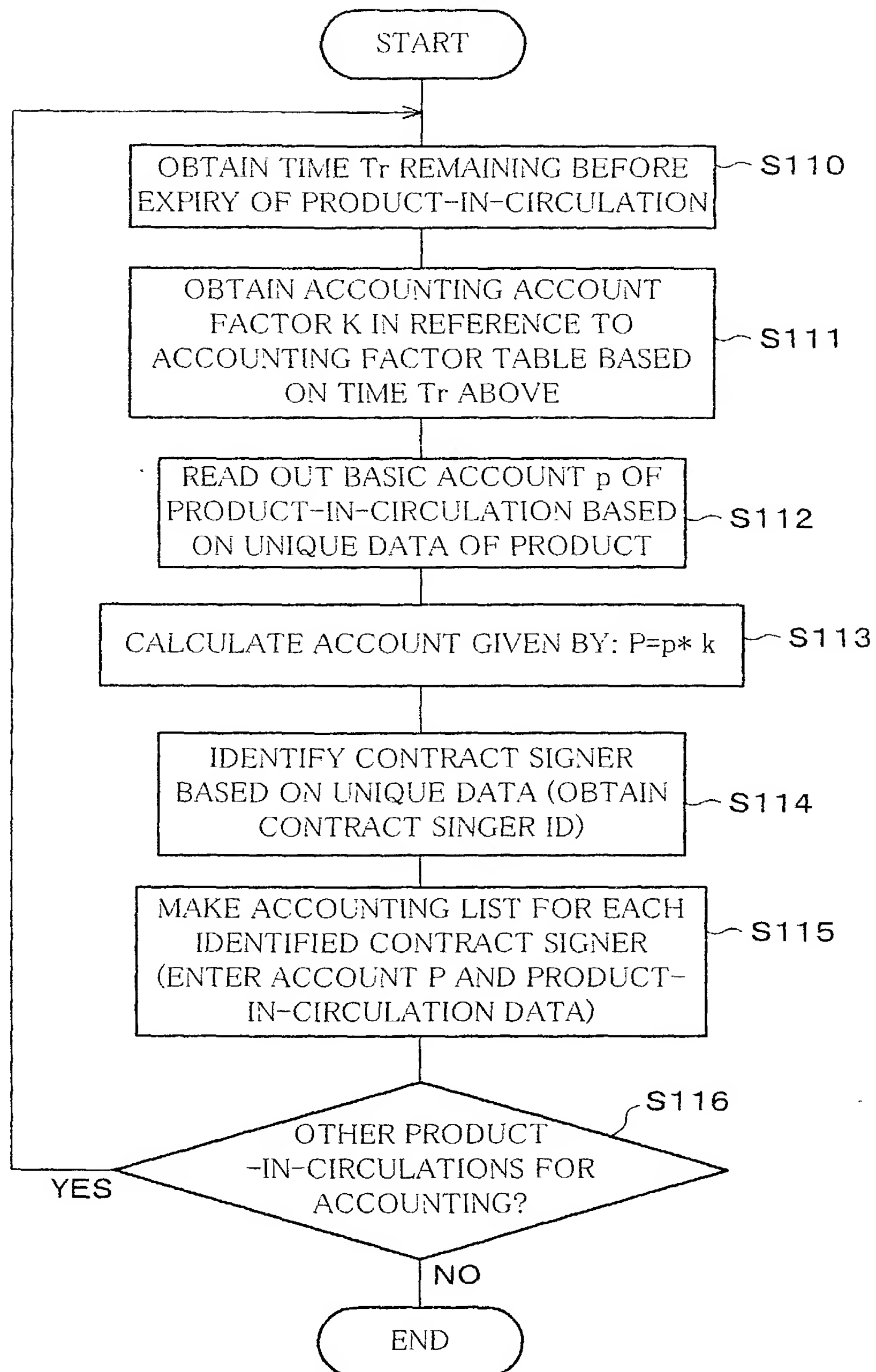


FIG.53

ACCOUNTING FACTOR TABLE [1]

TIME REMAINING BEFORE EXPIRY $T_r$	ACCOUNTING FACTOR $k$
$T_{r0}$ : MORE THAN 1 YEAR	$k_0=1$
$T_{r1}$ : 6 MONTHS TO 1 YEAR	$k_1$
$T_{r2}$ : 2 MONTHS TO 6 MONTHS	$k_2$
$T_{r3}$ : 1 MONTH TO 2 MONTHS	$k_3$
$T_{r4}$ : LESS THAN 1 MONTH	$k_4$

NOTE THAT  $k_0 > k_1 > k_2 > \dots$

FIG. 54

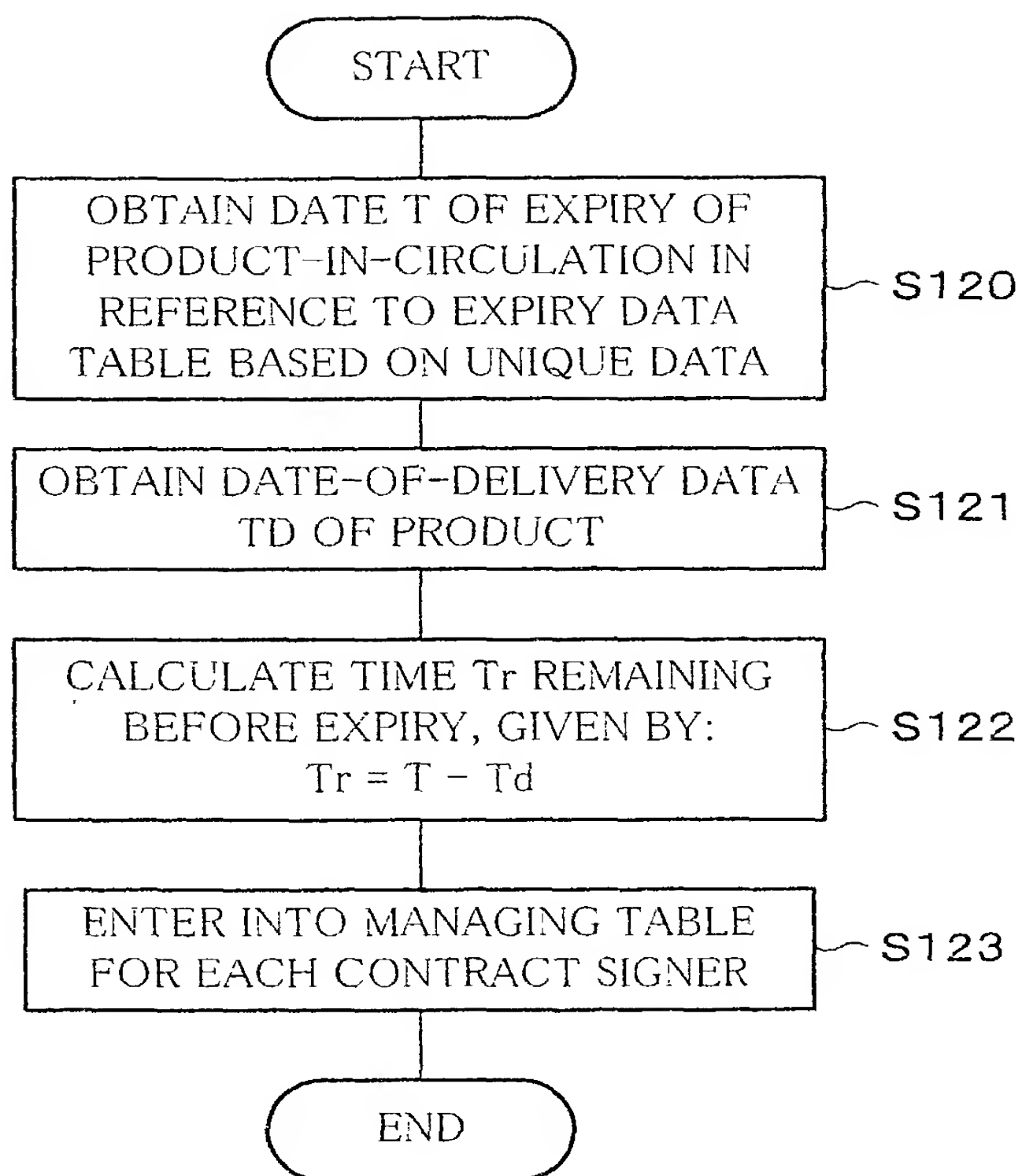


FIG. 55

CONTRACT SIGNER ID : 000125

No.	DATE OF DELIVERY Td	DATE OF PURCHASE Tp	DATE OF COLLECTION N Tc	SPARE ARTICLE DATA								TIME BEFORE EXPIRY Tr	PURCHASE STATUS	
				FULL DATA (FULL DIGITS)	TOP LEVEL		SECOND LEVEL		THIRD LEVEL					
					TOP LEVEL CODE	TOP LEVEL	SECOND LEVEL CODE	SECOND LEVEL	THIRD LEVEL CODE	TITLE	REMARKS 1			REMARKS 2
1	N/A	—	—	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
2														
3														
4														
5														
6														
7														
8														
9	.													
10	.													
11														

3 0 1 3 1 1 3 4 1 9 5 0 1 2 5 1 2 2 9

FIG. 56

CONTRACT SIGNER ID : 000125

No	DATE OF DELIVERY Td	DATE OF PURCHASE Tp	DATE OF COLLECTION Tc	SPARE ARTICLE DATA								TIME BEFORE EXPIRY Tr	PURCHASE STATUS	
				FULL DATA (FULL DIGITS)	TOP LEVEL		SECOND LEVEL		THIRD LEVEL					
					TOP LEVEL CODE	TOP LEVEL	SECOND LEVEL CODE	SECOND LEVEL	THIRD LEVEL CODE	TITLE	REMARKS 1			REMARKS 2
1	3/1/2000	—	—	0010 0000 0000 0101 0000	00	CD-ROM	10	APPLI-CATION SOFTWARE	0000	"DATA SEARCH"	DATA SEARCH, EXPLOITATION SOFTWARE	FOR PC USE	12/31/2000	NEW (SPARE)
2	3/1/2000	—	—	0010 0001 0000 0000 0100	00	CD-ROM	10	APPLI-CATION SOFTWARE	0001	"TRANSLATION ASSISTANT"	JAPANESE ENGLISH TRANSLATION ASSISTANT	"	7/1/2001	NEW (SPARE)
3	3/1/2000	—	—	0010 0010 0000 0000 1100	00	CD-ROM	10	APPLI-CATION SOFTWARE	0010	"INTERNET SUPPORT"	USABILITY ENHANCEMENT SOFTWARE	"	7/1/2001	NEW (SPARE)
4	3/1/2000	—	—	1100 0000 0000 0000 0111	11	EMPTY MEDIUM	00	VHS	N/A	—	GENERAL USE (FIVE IN ONE PACK)	"	6/7/2005	NEW (SPARE)
5	3/1/2000	—	—	1101 0000 0000 0101 0001	11	EMPTY MEDIUM	01	DV	N/A	—	GENERAL USE (FIVE IN ONE PACK)	DIGITAL FORMAT FOR VIDEO USE	8/20/2000	NEW (SPARE)
6														
7														
8														
9														
10														
11														

00000000 00000000 00000000 00000000



FIG. 57

CONTRACT SIGNER ID : 000125

No	DATE OF DELIVERY Td	DATE OF PURCHASE Tp	DATE OF COLLECTION Tc	SPARE ARTICLE DATA										TIME BEFORE EXPIRY 1r	PURCHASE STATUS
				FULL DATA (FULL DIGITS)	TOP LEVEL		SECOND LEVEL		THIRD LEVEL						
					TOP LEVEL CODE	TOP LEVEL	SECOND LEVEL CODE	SECOND LEVEL	THIRD LEVEL CODE	TITLE	REMARKS 1	REMARKS 2			
1	3/1/2000	3/10/2000	--	0010 0000 0000 0101 0000	00	CD-ROM	10	APPLICATION SOFTWARE	0000	"DATA SEARCH"	DATA SEARCH, EXPLOITATION SOFTWARE	FOR PC USE	12/31/2000	PURCHASED	
2	3/1/2000	--	--	0010 0001 0000 0000 0100	00	CD-ROM	10	APPLICATION SOFTWARE	0001	"TRANSLATION ASSISTANT"	JAPANESE ENGLISH TRANSLATION ASSISTANT	"	7/1/2001	NEW (SPARE)	
3	3/1/2000	--	--	0010 0010 0000 0000 1100	00	CD-ROM	10	APPLICATION SOFTWARE	0010	"INTERNET SUPPORT"	INTERNET USABILITY ENHANCEMENT SOFTWARE	"	7/1/2001	NEW (SPARE)	
4	3/1/2000	--	--	1100 0000 0000 0000 0111	11	EMPTY MEDIUM	00	VHS	N/A	--	GENERAL USE (FIVE IN ONE PACK)	"	6/7/2005	NEW (SPARE)	
5	3/1/2000	3/18/2000	--	1101 0000 0000 0101 0001	11	EMPTY MEDIUM	01	DV	N/A	--	GENERAL USE (FIVE IN ONE PACK)	DIGITAL FORMAT FOR VIDEO USE	8/20/2000	PURCHASED	
6															
7															
8															
9															
10															
11															

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



